

February, 1993 - Volume 10, No 2

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The Australian **COMMODORE** **& AMIGA** *Review*



Amiga 1200

Hands On Impressions
AND Expansion

OPUS vs SID

PART 1: Directory Utility Guide

Deluxe Paint Perspectives

A Whole New Slant

Visionary

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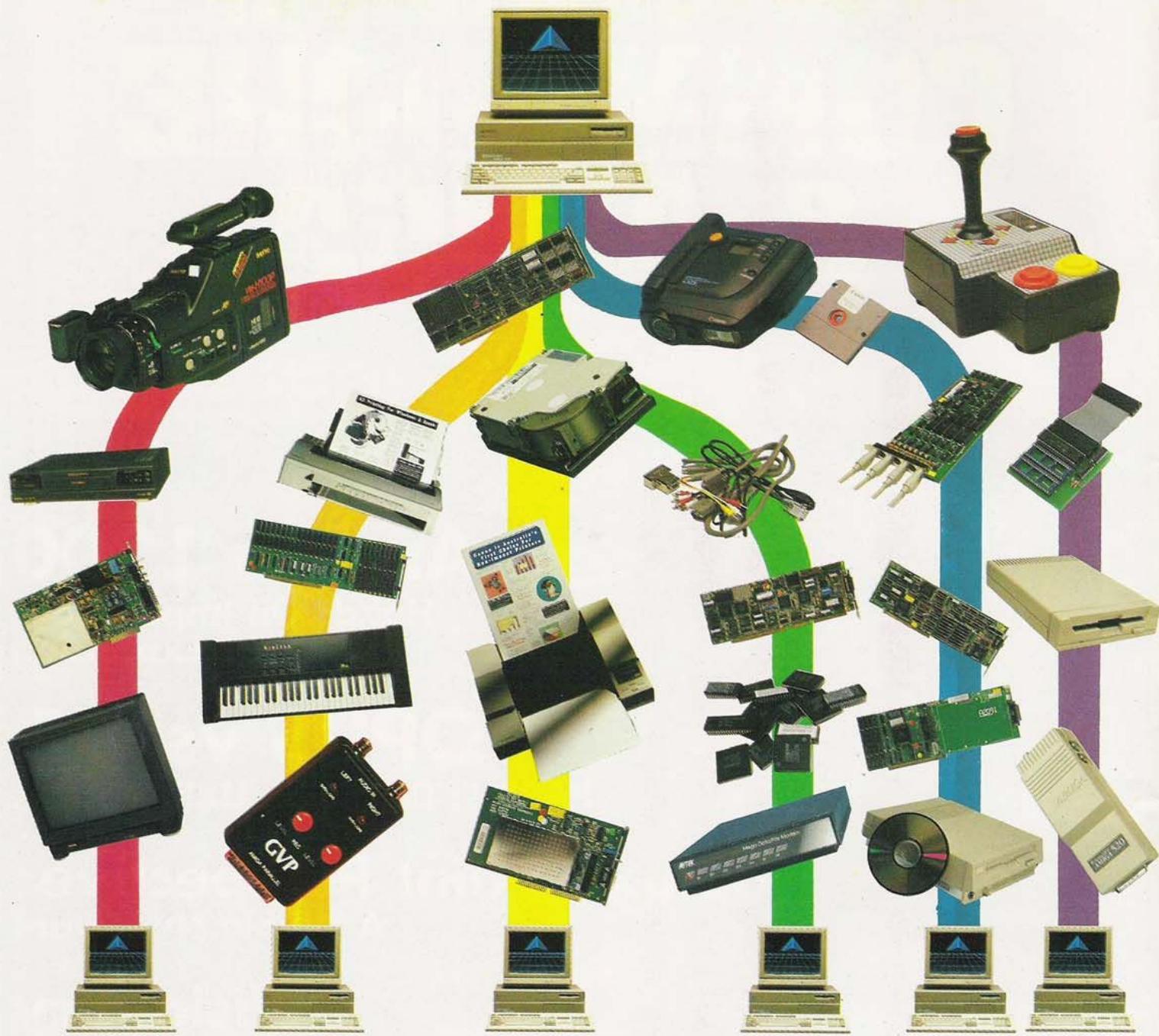
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Commodore

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February 1993

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& AMIGA
Review

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Editorial

On my office wall is a large poster. Thunderbirds Are Go!!! Thunderbirds one to five are all pictured, proudly hovering above paper mache mountains or taxiing in plastic hangers. I used to climb out of bed at 6.00 o'clock every morning to catch the reruns. A few months back I snapped up a video of several of the first episodes.



Strangely enough, the monorail that looked so futuristic back then is now running around Sydney; the forward swept wings of Thunderbird 2 exist on real jet fighters; vertical lift off craft are commonplace and deep space monitoring stations are here - minus the marionettes.

There's something strangely appealing about the old Thunderbird series, even today. The attention to detail, imagination of the designers and fascinating plots were way ahead of their time.

In many ways, it is all these things which make owning an Amiga so exciting. In 1985, the Amiga was ahead of its time. Today, we're witnessing the launch of a new range of models which are once again leading the way. The quest for realism. Better pictures, improved sound, faster processing or thinking power if you like.

The imagination is great too. How many other companies have dared stick with a platform which is not a part of the great MS-DOS world? Only Apple Macintosh. Atari tried and failed. Most of the other contenders of the eighties are gone, Sinclair, MSX, Tandy, BBC and the list goes on.

There's no doubt, the Amiga is a good plot. The highs and lows of Commodore's successes and failures. The fantastic applications being developed, and the growing list of main stream products. Third party software which other computer owners only dream of. Image Morphing, Virtual Reality, Photo-Realistic Animation - the Amiga can do it all.

The power to do these things can make day to day tasks on your Amiga easier, more fluid, more enjoyable. Let's face it. Owning a computer that's a little out of the ordinary isn't such a bad thing. It's easy to impress visitors with something they've never seen. It's easy to impress yourself too! With Workbench 3.0, the AGA machines, new accelerators, sound cards and software now in development, I think I might just get some Amiga posters to put on the wall soon too!

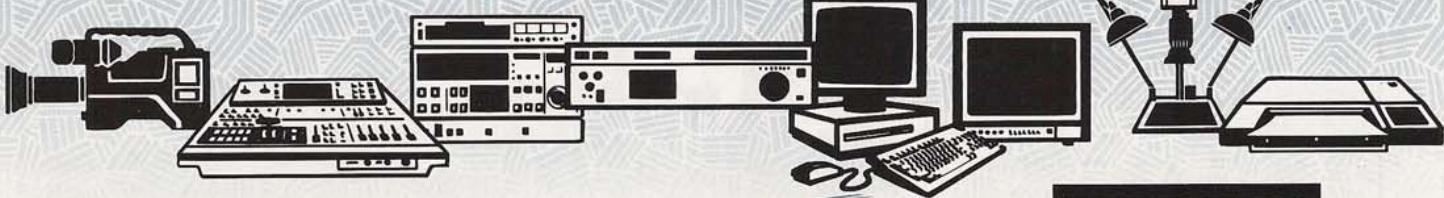
Andrew Farrell

Computer Man

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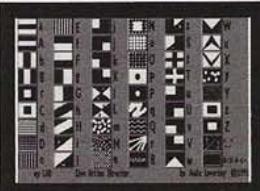
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"I found a link to creating great special effects on Nickelodeon's Nick Arcade..."

Karin Miteff Co., Producer, Nickelodeon Arcade, Bethea/Miteff Productions, Orlando, FL.

"I created 24-bit files from graphics to keep their colors intact. These images were captured by the Quantel Paintbox® from the IV24's analog RGB output. The Paintbox generated background, then captured by the IV24 via RGB. The most telling testament to the board's quality is that the IV24 received the best response of all the Amiga-related devices I have shown broadcast engineers."



Graphic Courtesy of Nickelodeon

"I found a link to corporate presentations"

Bill Evans, Corporate Communications Technician, Fabmet Corp., Garden Grove, CA

"I use the IV24 mainly as a 24 bit display device in an A3000. I scan in 24 bit images with an Epson® 24 bit scanner, and then network them to a Video Toaster®. The finished product is displayed in our training room on two 27" Mitsubishi® monitors. I will also use the IV24 with a Polaroid® freeze frame unit."

"I found a link to great animations..."

Tom Hutchison, Producer, Wild Orchid Graphics, City Rock, OR

"IV24 is what I've been waiting for. I use it with Imagine® software to produce animations for a local cable company. I really like being able to use one monitor and have a de-interlaced output that integrates into the system better than any other frame buffers I looked at."

"I found a link to a money-making opportunity..."

PAUL GILMAN, Entrepreneur
(Scientist / Retired, Kodak),
Personal Sports Cards, Penfield, NY

"I bought GVP's IV24 so my grandson and I can make and sell personalized baseball cards with Deluxe Paint®. The IV24 is the only product on the market with the RGB IN and OUT I needed to connect my video camera to a Kodak® thermal printer. It suits my needs perfectly. I've used many IV24 features — including Picture-In-Picture — and they're all superb."



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UPDATE COLUMN

Well, it's finally arrived! We now have stock of the new Wordworth V2.0. Despite my earlier statements that Wordworth was the best ever, I have to admit that V2.0 is even better. This latest version comes with 17 genuine Agfa Compugraphic Fonts and a selection of colour and mono clip art and uses revolutionary Intellifont technology to produce silky smooth on-screen fonts of any size. Other new features include a new tool bar: column: indexing: table of contents: end notes: hot links: bookmarks: text sorting and many others, in fact over 100 improvements. Frankly I cannot see how they are ever going to improve on this one.

The other great news is that there is an upgrade to Wordworth 2, but only from earlier versions of Wordworth, and will cost \$149 including P & P. For further details please ring us on 748 4700.

Talking about upgrades, let me remind you that we are still offering the upgrades from Home Accounts to Home Accounts 2 and from Amos to Amos Pro.

Keep your eyes out in the shops for Dalek Attack - a great Dr. Who adventure; Fruit Machine; Blade Warrior; Frankenstein; and Neighbours (budget priced software) and following in the tremendously successful footsteps of ADI educational programs we have now released ADI Jnr - brilliant programs for you young children to learn counting and spelling.

Finally, don't forget to ring us for details of our Amiga clearance sale this month - 748 4581.

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Ram Rumbles

Our monthly column of media spotings, rumours and the odd complaint continues. Keep those letters rolling in.

What's Wrong?

A recent letter to Ram Rumbles reads: The media spotting section in Ram Rumbles has always been popular. I have a great idea! Why not give a prize for the first person to spot a Commodore advertisement on TV? These sightings are very rare. Consequently people sometimes say to me "You have an Amiga? What's that?"

... All the computers in the Commodore range are great value. Our society is heading towards an era of extended leisure time for a lot of people and these people need a hobby to be able to use their time constructively. What better hobby than a computer that covers so many areas of interest!

If Commodore had their act together they could fill this need. Most people on a tight budget or unemployed could afford a budget price C64 package or an entry level Amiga 600 and there are still the top level Amigas for those who can afford it.

Because of lack of advertising by Commodore most people think that they can't afford a computer. I have talked to people who were about to buy a games console for their kids who had no idea that they could purchase a full on computer for just a bit extra, a much better investment. Even if Commodore launch an efficient advertising campaign for the 600 (I have not seen anything yet, the WOC show was just preaching to the converted) they have still lost many thousands of potential customers over the last two years. If they don't then the 600 will just sit on the back shelves of stores like the 500 does now, and Atari would just have to put a small classified ad in the *Telegraph* to get a larger slice of the market than Commodore, thereby getting the last laugh.

Ron Andrews, Campsie

PS. I always buy ACAR which is an excellent magazine and has done more for Commodore computers in Australia than anything else.

Media Spotings

Mr Squiggle

Matthew Lowe of Dunmore writes: While I was flicking through the channels of my TV, I saw GUS on Mr Squiggle using an Amiga 500 and a 1084s and displaying pictures of a TV station he was designing.

Ed - Won't own up to watching Mr Squiggle? Flicking channels? A likely story!

The Main Event

Mr Edward Gallo of Redland Bay says: A quick spotting of a trusty old C64. My children were watching the TV show *The Main Event* on Chanel 7 one evening. One of the special celebrities was Judy Nunn (actress and author currently appearing in *Home and Away*). While the camera was panning around her home, it clearly showed a C64. I wonder if Judy wrote her bestseller, *The Glitter Game*, on a good old favourite like *Easyscript* or similar word processor. Keep up the good work in a great magazine.

Barbeque Shapes, Bill and Ted, and Jana

Matthew Polak of Dimboola eagled eyed this assortment: There is a "Barbeque Shapes" advertisement on tele at the moment that shows a brief glimpse of the corner of an A2000 keyboard plus that rather "inglorious" Commodore mouse.

This next spotting I'm not sure about, but if it's confirmed I reckon it would be the spotting of all spotings due to the status of its environment. I watched the video of *Bill and Ted's Most Excellent Adventure* (actually it was the sequel but I can't remember its name) a little while back and at one point this computer synthesised voice comes from some robotic thing. The voice sounded suspiciously like an Amiga's own rather individual sounding "damaged voice box" type accent.

Then on *A Current Affair* there was a show a while ago about Neo-Nazis still operating in Germany. They showed a computer game on an Amiga that was all about killing Jews. Not the most beneficial thing to do with an Amiga, is it? □

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**Everybody's talking multimedia revolution.
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A lot of apples were bruised when we first introduced Scala, the professional presentation package. With the new Scala MultiMedia MM200, they will be blown into oblivion!

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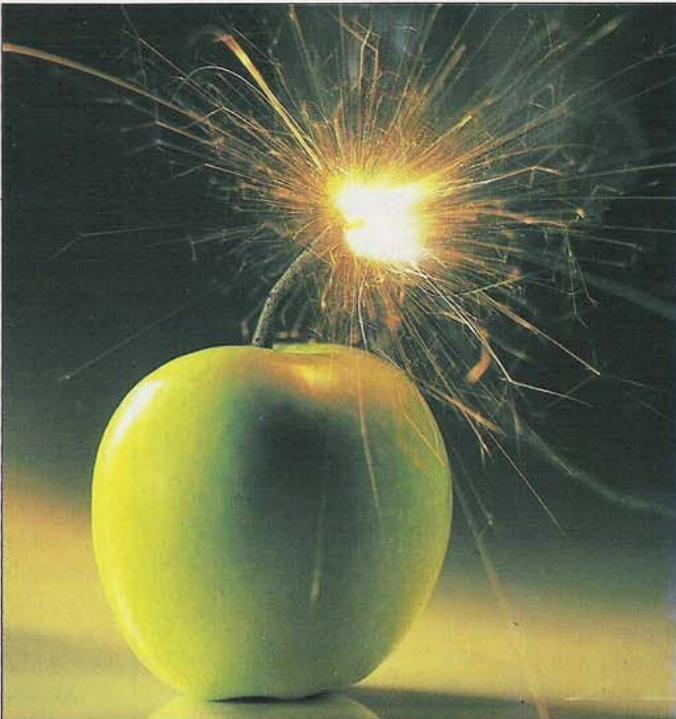
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"...the best program in show business." *Amiga Format (UK)*

"Scala MM200 is the kind of software that many serious users simply can't afford to be without." *Amiga Computing (UK)*

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Scala Snapload

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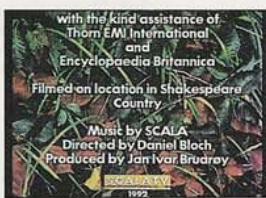
Scala LINGUA

The multimedia language Lingua with its close link to ARexx puts the advanced user in total control!

For a close look at the market leader in multimedia software, contact your dealer today!



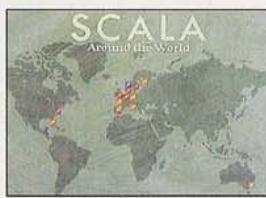
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Notepad

Pagesetter-3 Released

New features of Gold Disk's *PageSetter III*, one of the most popular entry level desktop publishing programs on the Amiga, include a new Word Processor, Spell Checker, Colour Paint Program and more than 120 clip art files.

Automatic text run-around graphics is now supported. There's built-in structured drawing tools for lines, rectangles, ellipses and polygons; sharp output to the highest possible resolution of Preferences and PostScript printers; a variety of type styles including bold, italic, underline, outline, user-defined pattern fills etc. It has an output capability as large as 17" by 17" and support for the new AGA chip set giving up to 256 on-screen colour support.

It will run on any Amiga with 1 MB of Ram and two disk drives and is compatible with Workbench 1.3, 2.0 and 3.0. It is available through Amiga dealers or the company direct. RRP \$136. For more information contact Desktop Utilities on (06) 239 6658.

Professional Page 4.0

At the recent World of Commodore Show in Toronto, Gold Disk demonstrated a new version of *Professional Page*. It is fully compatible with Commodore's new AGA Chipset and includes a hot linked paint program for fast changes to graphics as part of the company's upgrade program for current users of *Professional Page 3.0*.

New features include: support for the new AGA chipset; a hot linked graphics editor; enhanced graphic handling with new graphics import filters; additional text handling features; user-definable display modes.

Professional Page will run on any Amiga with at least 2 MB of Ram and a hard disk drive, is Workbench 1.3, 2.0

and 3.0 compatible, and will be available through Amiga dealers or the company direct. For more information contact Desktop Utilities on (06) 239 6658.

CSA to launch Derringer Accelerator

Amiga accelerator specialist, Computer System Associates, is readying an all new accelerator that breaks speed and price barriers at the same time. The Derringer is a new 25 Mhz 68030 based accelerator which CSA claims gives A3000 level performance to any Amiga for \$249.95 - about the same price as many 68000 based accelerators - while still running three to five times faster.

The Derringer supports the addition of 1, 2, 4 or 8 more megabytes DRAM, together with a 50 Mhz 68881 or 68882 math coprocessor. Additional 16 and 32 megabyte DRAM upgrades will be possible as future DRAM technology develops.

For added speed, the Derringer comes with proprietary software designed into the board which gives users the option of relocating the Amiga operating system (Kickstart 1.3 or 2.04) into 32 bit dynamic RAM, leaving the MMU free for other programs.

Software is provided through optimised performance of the Derringer by allowing critical operating system libraries to also be moved directly into 32 bit RAM.

The CSA Derringer is a self-contained, single board, plug-and-play unit. Its 6-layer design and precise, reliable surface mount technology reflect the highest level of consumer product manufacturing technology. It is also easy to install and is completely auto-configuring. Like CSA's popular Mega Midget Racer, it replaces the 68000 CPU inside your Amiga.

CSA's Derringer is designed and priced to be the best choice for those Amiga owners who are considering and budgeting for one of the 68000-based accelerators currently on the market. With the Derringer, you can now complete ray-tracing, animation, and other operations at 3-5 times faster than equivalent priced 68000-based Amiga accelerators.

"The Derringer is also a good choice for anyone who needs greater speed now, but can't afford the \$2,000 pricetag of the most affordable 68040-based accelerators," according to Steve Riker, CSA's sales and marketing director. "For these buyers, the Derringer is a way to work faster until they can afford a faster '040."

For more information contact Ami-Tech on (02) 544 1874.

GigaMem - Virtual Memory

If you keep running out of computer memory but don't want to pay the high price of RAM chips, then INOVATronics has a solution: *GigaMem*, a new software utility that increases the effective RAM capacity of your Amiga by treating unused hard disk space as if it were normal system RAM.

Without making you spend hundreds of dollars on memory upgrades, *GigaMem* can give you additional usable RAM equal to the free space on your hard drive - up to 1 Gigabyte.

GigaMem is the first commercial Virtual Memory (VM) utility ever made available for the Amiga. Already widely used on Mac and PC/Windows platforms, VM utilities direct the operating system to treat free hard drive space as RAM, once all other RAM is being used.

GigaMem works with any Amiga using the Motorola 68020 or 68030 processor with Memory Management Unit (MMU) and Kickstart version 2.04 or later. This includes all Amiga 2500 and 3000 systems, and all Amiga systems with MMU-equipped 68020 or 68030 accelerators.

A special version of *GigaMem* for Amigas using the 68040 CPU (includ-

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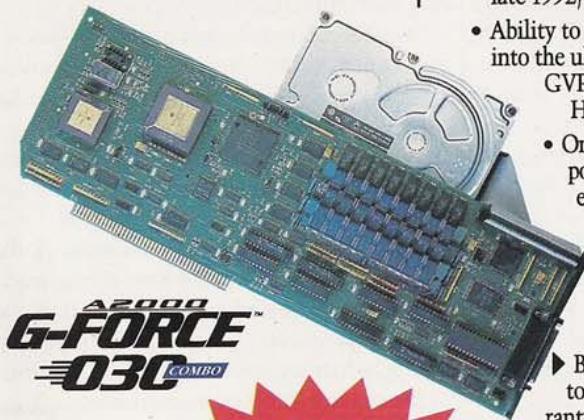
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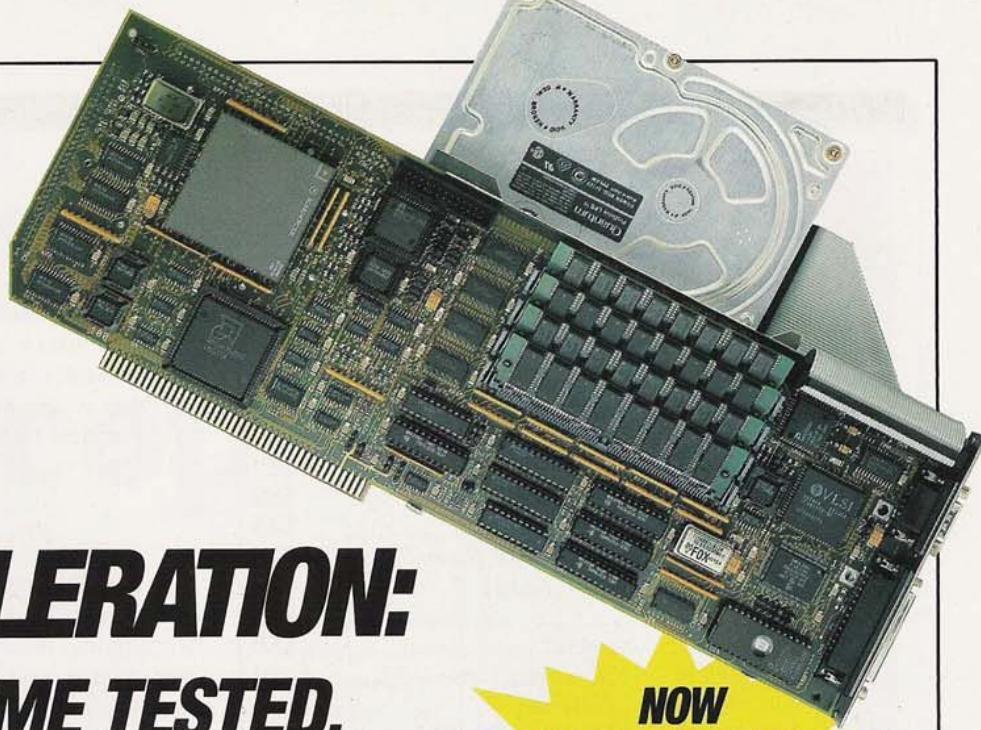
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ing the Amiga 4000) is also available.

GigaMem is fully accessible at all times and is completely transparent to system software and all programs loaded subsequently. Written in 100% assembly language for efficiency, *GigaMem* uses special disk caching and intelligent paging routines to speed access to disk-based virtual RAM. *GigaMem* is also easy to install and includes customization tools. For more information contact Desktop Utilities on (06) 239 6658.

Directory Opus 4.0

Australia's favourite disk and file management utility has been upgraded yet again. Along with A4000 and A1200 compatibility, increased audio/image file support, and many other new features, *Directory Opus 4.0* is now more intuitive, more helpful and more flexible than before. You can even completely re-configure the interface to suit the way you want to use the program.

Directory Opus 4.0 now supports all Amiga graphics and Audio support has also been expanded. Now you can use *Directory Opus 4.0* to play Anim and Anim Brush files, or view images saved in all ILBM Formats. You can also play sound files stored as Noisetracker, SoundTracker, ProTracker, MED w/MIDI Oktalyzer, ASVX or Raw Data.

Together with expanded AREXX Support (now over 100 commands), *Directory Opus* now has a convenient Hotkey feature for launching any Amiga application from the keyboard, so long as *Opus* is either running or iconified. (Amiga=D, for example, could be set to launch *DeluxePaint*.)

Directory Opus 4.0 now also lets you print individual frames from full screen and brush animations. Also new: a new Font View facility that lets you print out an entire alphabet of any font you select, including Amiga and Compugraphic Bitmap fonts under Kickstart 2.04 and beyond.

Other new features include improved documentation, players for CanDo decks, and a completely revised approach to using system resources. Instead of loading the entire program at once, *Opus* now runs individual functions as they are called for. This not only reduces demands on system RAM, it gives users a way to access individual program features directly from the CLI, without ever having to load *Directory Opus*.

Directory Opus 4.0 is now very user-configurable, meaning that you can optionally modify the interface to suit your needs or personal preference.

Configuring *Opus* to meet your needs is a lot easier than you might expect, thanks to an extensive new configuration system that gives instant on line assistance for whatever you need to do. For instance, if you are in the middle of attaching an Amiga Dos command to an onscreen button, you could instantly call up a list of executable command names. Whatever you're doing in *Opus*, help is always close at hand.

Most important, the new features added to *Directory Opus 4.0* won't put off users of previous versions for day to day tasks like formatting floppy disks, copying or deleting files,

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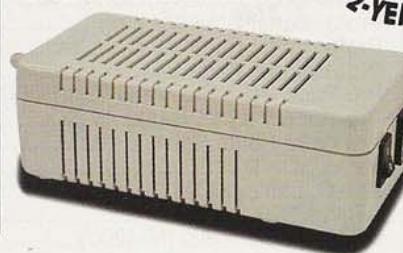
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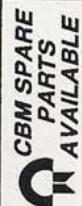
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Directory Opus 4.0 works with any Amiga with one Megabyte of RAM or better, running any version of Kickstart. Contact Left Side Software on (08) 293 2788.

Avtek MegaPlusFax

Avtek Data Communications has released the new MegaPlusFax V32bis (CD930) external Fax/Modem that retails for \$749.00 including tax. The modem is a synchronous/asynchronous device that operates at all of the data speeds up to 14,400bps including 1200/75bps. Offering error correction (MNP 4, V42) and data compression (MMNP 5, V42bis) the modem supports TR29 Class 2 fax operation allowing sending and receiving of faxes at up to 9600bps.

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Citizen GSX-240

The Citizen GSX-240 was launched at the end of last year, and reports coming in show it is doing very well. The 240 has a Bi-directional interface and a world first - quarter page printing. There's also a software lock and colour scalable fonts, with a retail price well under \$1000.

Citizen presently has 5% of the dot matrix market, and 35% of the home printer market. On printer quality, the GSX can deliver 360 x 360 dots per inch (dpi) in colour and black and white. It also has a film ribbon available for dark, crisp graphics and letter output.

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Pagestream fonts	74.95	77.95	
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Prowrite V3.3	112.95	116.95	
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World of Commodore Toronto Report

Axiom was showing *ANIM Works*, an animation processor/editor which was targeted at *Toaster*, *AdPro*, and *DPaint* users; and *Pixel 3D Professional* which really impressed me with its very fast interface & rendering speed.

Centaur was showing *OpalVision*, which looked very clean and refined, but I asked the rep there when they were planning the de-interlacer (the most important part for my A3000 and my eyes) and he told me that unfortunately that was what they were doing LAST... Projecting a release sometime April or May.

Commodore demonstrated the A4000 and A1200, both loaded with at least *Art Department Professional*, *Deluxe Paint AGA*, and *Prowrite AGA* for people to demo. About three active machines for each, with the other one each running demos.

Comspec was showing *Sign Engine* and *Sign Cutter*, both very fast and very clean.

Digital Creations was showing *Briilliance*, running on A4000s and an A1200. It seems a very solid system, and although they use the bottom of the screen icon bar (like *DigiPaint*), the interface was clean and intuitive.

Electronic Arts was showing *Deluxe Paint AGA*, which seemed very near to release. The interface is very similar to the last version, but seems to use every video mode available through a cleaner and faster interface.

Gold Disk was showing *Professional Page 4.0*, and while it was still a beta, seemed very stable. I have one word to say about this upcoming release ... FANTASTIC! I use this every day and was thrilled with their new features and modifications. Here are some of the ones that made my Con: Built in visual Pair Kerning, Edit Two Page Layout at the same time, User definable zoom, and my two favourites, Extended PS characters (like the dagger, ellipsis and more!) and finally, Import IFF, TIF, GIF, PCX, BMP, *ProDraw*, EPS w/ TIF Header PLUS *Adobe Illustrator* and *Aldus Freehand* files ... Which can then be Hotlinked & EDITED in *ProDraw*!

INOVAtronics was really a hot spot, with their *Tempest*-like game, *VektorStorm*, which is very clean and very

close to the original. Also the new version of *Directory Opus*, v4.0 was being shown, and it's even better and easier to use than the original. They also were showing *Cando 2.0*, *GigaMem* and the new release, *Turbo Print*.

Migraph was showing its new 400 dpi (max) scanning wand and optional sheet feeder. I didn't get a chance to see them in action, but they looked like the answer to fast, multi-page OCR scanning.

Moonlighter Software was showing *Ami-Back* but didn't have a releasedate set yet for *Ami-Tools* ... Scala was running demos all through the Con on the use and functions of the *Scala* software.

Soft-Logik was showing *Pagestream* 2.2 and *Art Expression*, their structured drawing program, and were demoing *typeSMITH* "The professional Amiga outline font editor" which can create and load *Pagestream*, PS and Compugraphic fonts for use with *Professional Page*, *Professional Draw* and *Workbench 2* and 3, due to be released in January.

Also Seen: The *Virtuality* system, and Con attendees were given five minutes to experience this for themselves. The only drawback was the size of the line.

Commodore was showing a video of their past advertising campaigns for the C64 and A1000 ... Some of which were very good, and some which seemed to try and do anything but show the machine ... I have to admit I got goosebumps seeing the original A1000 ad (Commodore should try to re-use the idea, but with showing the system more than the scenery) ...

Don Suhr Compuserve 73117,1337

Exhibitors: Amazing Computing; Amiga News; AmigaWorld; AmiWare; Amsoft Computer Systems; AVID Publications; Axiom Software; Black Belt Systems; British Magazine Distributors; Canada Remote Systems; Centaur Software; Commodore Business Machines; Computer Express; Computer & You; Computer Variables; Comspec; Datacorp Distribution & Great Valley Products; Digital Creations; Dineen Edwards Group; Disks & Labels to Go; Electronics 2001; Electronic Arts; Fairbrothers; Gold Disk; Hamilton Amiga Users Group; Hypermedia Concepts; ICD; INOVAtronics; MDL Technologies; Media Innovations; Memory World; Micro R&D; Migraph; Moonlighter Software; Neutron Computers; Nomi Computer Sense; Premier Software; RCS Management; Scala; Soft-Logik Publishing; TPUG; Videographix; & Whitestone.

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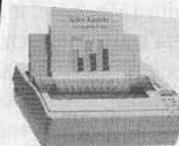
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Each month we will publish the most interesting letters we receive. Think of it as an open forum where you can view your opinions, share ideas or ask questions. Around half a page is a good length. The contents may be edited for brevity, accuracy or legality. If you don't wish your name and suburb to appear, please say so in your letter.

CDTV Questions

I write to you concerning a matter that is keeping me in suspense. I have read much of your expertise over the Australian Amiga Fidonet Conference. Soon I am going to buy an Amiga 3000 or 4000. I would also like a CD Rom player.

Can I use the CDTV discs on the Amiga? Possibly by networking or some software? I would appreciate the benefits of having a CDTV player in the living room rather than using the computer. It seems stupid having to buy two CD-Rom drives which I can't afford anyway. It also means I could transform the CDTV into a 500 for Kickstart 1.3 compatibility.

Andrew Pack, East Brisbane

Ed: You can add an A570 CD-ROM drive to the Amiga 500. This device is completely compatible with the CDTV player. Commodore have announced plans for a similar device which may be installed in the larger Amigas, however to date, nothing is shipping. You can Network a CDTV unit to any Amiga using PARNET. See our 1993 Amiga annual for details on how to do this.

Emerald Mine Club

I am a regular reader of your magazine and have it delivered by my newsagent in Bell Park. Would it be possible to put a

note in Ram Rumbles that a group of Geelong Amiga Users have formed An Emerald Mines Club and are looking for other interested people who may wish to join.

We have about 100 titles of *Emerald Mines* and *Boulderdash* games and we trade with the European Group in Holland. We are a non profit group just interested in *Emerald Mines*.

Brian Thompson

PO Box 32, North Geelong Vic 3215

Ed: Sorry, it wouldn't fit in Ram Rumbles - I hope this will do! *Emerald Mine* is a great game, how about sending us a few of the better ones to review in our games section?

Which Amiga?

After four years of using a V1.3 A500 with 1Mb, I feel it's time to upgrade but I don't know which machine to buy. I'm looking at the A600, A3000 or a machine with the new AGA chipset. I'm scared to buy the A600 and 3000 because they might become redundant without the AGA. If I do buy an A600 or 3000 will Commodore give us the choice to upgrade our machine with the AGA set. Please set my mind at ease.

Jeremy Taylor, Bunbury

PS: Congratulations on the best computer magazine available in Australia.

Ed: Hang off. Buy an A1200! Watch for trade up deals soon. (See the review elsewhere in this issue.)

Faulty A500 and CrossDOS

I discovered ACAR during September last year, and I would like to congratulate the team for producing an Australian magazine of such quality.

I own an Amiga 500, running Work-

bench 1.3 and before I bought this part way through 1992 I had a C-128 D. My Amiga is an ex-display model, and I have had a few problems with it. A lot of the time when I turn it on or reset it, the Caps Lock light flashes and keyboard doesn't respond.

I was wondering what the problem might be. Before this problem occurred, my computer 'died' and I had it fixed, this was a problem with the power pack. Another problem I have is that when I use *Octamed Pro V3.00* and *Pagesetter V1.21* occasionally the screen goes blank and I am unable to do anything about it. I am using a TV modulator. None of my friends have this problem, so it must be my computer. Is it related to my previous complaint?

Also I have just obtained *CrossDos*, and I was wondering if there is any way to access MS-Dos disks from Workbench, or is it only possible from the CLI? And for all of those people who have to use Microsoft Works, a successful way of loading up files given a WPS extension by Works is with the Generic Load Text option in *Pagesetter*. However, the file needs to be corrupted slightly, so it is a one way trip only.

Matthew Schinckel, Naracoorte

Ed: You have a faulty keyboard. The number of times your caps-lock key flashes will tell the service people what is wrong. Write down the number of flashes next time it happens, then take your Amiga in to a service centre. Commodore have a list of the nearest to you. You can call them on (02) 457 8388. There is also a list in *Amiga Annual 1993*.

The screen blanking may be an old Virus called Byte Bandit. Try a good virus checker like BOOTX to check out disks. If you're all clear, before you put your machine in, describe the fault in more detail and see if you can replicate it a specific way.

To use *Cross-DOS* from Workbench you will need Workbench 2.x. MS-DOS does not support file icons, which is why currently you can only access it be the CLI or a file utility like SID, OPUS or DiskMaster. Under Workbench 2.x you can view files which do not have icons, and copy them like those that do, all from the Workbench. No more SHELL hassles! *Cross-DOS* is actually built in to Workbench 2.1 and higher. □



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DEALER ENQUIRIES WELCOME

Amiga A1200

Expansion + Hands On + Graphics

by Andrew Farrell

In late December, Commodore kindly supplied an Amiga 1200 for review. The first and only one in the country at the time. Now there are a handful. Soon there will be thousands.

Unlike the Amiga 600, the A1200 addresses all of the shortcomings of the existing graphics hardware. The A1200 is also reasonably fast. Around five times faster than an Amiga 500, on average. In use, the screen refresh is about the speed of Amiga 3000. This machine feels snappy.

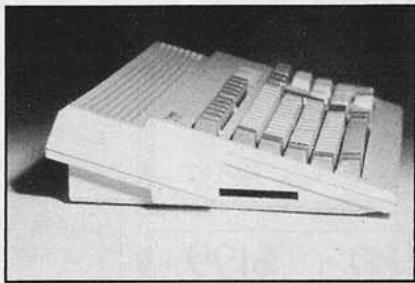
The unit itself is a like a stretch A600 - but don't let the similarities fool you. The case might have that same peculiar style, with the addition of a numeric keypad and larger expansion slot. But inside, there's a whole new collection of custom chips and techno-wizardry.

I believe the Amiga 1200 will be a popular upgrade choice for Amiga 500 owners. It's also the first machine from Commodore to cost effectively compete with the speed, resolution and colours of the better MS-DOS machines. In fact, as usual, Commodore have blown the PC clean out the ball park in the graphics department.

AGA - Advanced Graphics Architecture

We've already talked a lot about the new AGA chip set in our December and October issues last year. However, at the time few people had actually seen the AGA chips in action.

What are they? Inside your Amiga special tasks are handled by custom circuits designed especially for one group



of functions. Grouped together on tiny slices of silicon, many functions can be combined onto one silicon chip to create a powerful independent processor.

The new Amiga range with the Advanced Graphics Architecture have higher resolutions, in more colours, than ever before. The display is photo-realistic. In other words, you look at the screen, look at the photo and the similarity is amazing. The AGA's high resolution mode can display over 256,000 colours from a palette of 16.7 million. More than enough to capture the subtle tones of flesh, or the vibrant reds of a rose.

At A Glance

- * Motorola 68EC020 microprocessor running at 14 MHz
- * Factory Installed Motorola Floating Point Unit (FPU) available
- * AA custom chipset offering graphics with 256 colours from a palette of 16.8 million in all colour modes
- * Built-in de-interlacing of NTSC and PAL video modes
- * Up to 2 megabytes 32-bit "Chip" memory
- * IDE (16bit) hard drive
- * Optional internal 2.5 inch hard drive
- * Integral full-size keyboard with numeric keypad
- * PCMCIA "credit card" memory/accessory slot
- * Internal 150-pin "local bus" CPU slot
- * Expandable to 8 megabytes "Fast" memory
- * RGB, colour composite, and RF (television) outputs
- * Built-in 880 KB floppy disk drive
- * Standard Four voice stereo sound output

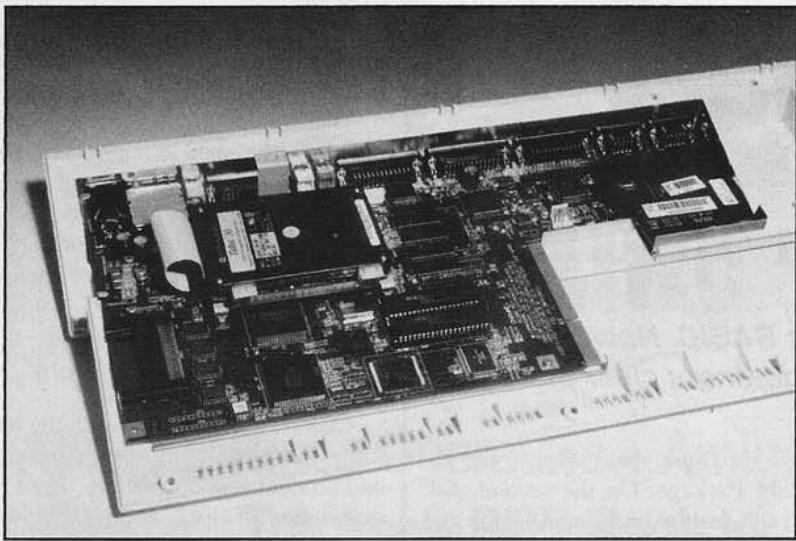
Although the sound capabilities of the Amiga are also a part of the custom chip set, no improvements have been made just yet. However, a huge update is around the corner and it will plug into the A1200.

Expansion Memory

The amount of random access memory (RAM) in the A1200 is expandable to 10 megabytes. The Amiga's memory consists of Chip RAM and Fast RAM. Chip RAM is memory

The Amiga 1200





Compact design with two expansion options - internal or PCMCIA card

shared by the microprocessor and the Amiga's custom chips. Fast RAM is memory used exclusively by the processor. The A1200 can use up to 2MB of Chip RAM and 8MB of Fast RAM.

Up to 4MB of 32bit Fast RAM can be added using the CPU slot on the underside of the A1200. A CPU slot board containing its own microprocessor, such as a 68000/30 accelerator, could contain more than 4MB of Fast RAM. An additional 4MB of 16-bit memory can be added using the PCMCIA memory card slot.

Drives

The A1200 can accommodate a 2.5 inch hard drive internally. There's a built-in Intelligent Drive Electronics (IDE) hard disk controller, to which the Hard drive may be connected.

External storage devices such as a CD-ROM tape, or hard drives may be added using the PCMCIA slot.

Accelerators

The 150 pin CPU slot accessible through the door in the bottom of the A1200 can accommodate various types of expansion. This can include accelerator boards, additional RAM, PC emulators, and other options that must have direct access to the Amiga's internal hardware.

Already a number of boards have been announced for this slot. Microbotics have announced the MBX 1200 - a memory and Floating Point Unit add on. There's room for up to eight megabytes of 32-bit wide Amiga FastRAM. The board with a standard 14MHz math chip installed speeds up

floating point operations by as much as 55 times that of the native A1200. Adding 32-bit wide FastRAM to the MBX 1200 boosts general operating speed of the system by more than 75%.

With FPU and FastRAM installed, the average of all the tests in the AIBB Benchmark is more than eight times the speed average of a native A1200. Expect to pay around \$350. No doubt we will see even faster accelerators appear soon. (For more information contact MicroBotics, Inc., 1251 American Parkway, Richardson, TX 75081 on (214) 437-5330.)

Conclusions

Expandable, fast, impressive graphics - and better performance than a similarly priced PC. Oh, the price - around \$1499 for the hard drive version - but watch for trade up deals.

Workbench 3.0 has many well thought out improvements - next month we'll take you on a guided tour of what's new. Until then, make sure you add your name to the list of A1200 buyers at your local Amiga store. □

NEW AGA Display modes

NB: All existing modes have access to full AGA palette.

DBLNTSC Monitor

Screen Display Mode	Screen Resolution	Color Palette
High Res	640 x 200	256/16 million
High Res Laced	640 x 800	256/16 million
High Res Laced No Flicker	640 x 400	256/16 million
Low Res	320 x 200	256/16 million
Low Res Laced	320 x 800	256/16 million
Low Res Laced No Flicker	320 x 400	256/16 million
DBLPAL Monitor		
High Res	640 x 256	256/16 million
High Res Laced	640 x 1024	256/16 million
High Res No Flicker	640 x 512	256/16 million
Low Res	320 x 256	256/16 million
Low Res Laced	320 x 1024	256/16 million
Low Res No Flicker	320 x 512	256/16 million

Software shipping with AGA support now:

ProWrite 3.3, Final Copy II, ImageMaster 9.21.

Software supporting AGA in the near future:

- Deluxe Paint AGA, Scala MM 2.0, Professional Page 4.0, PageStream HamLab Plus, Brilliance.

Visionary

Make Your Own Adventure

In the beginning ... there was BASIC. Now there's Visionary, and Jeff Wilson is getting a clear picture.

Being a keen adventure gamer when I can find the time, I jumped at the opportunity to review *Visionary* which was billed as "The most advanced Adventure Writing Language available for the Commodore Amiga."

I have played adventure games since the early text adventures on my TRS-80 machine back in 1980 and was thrilled when I moved up to a VZ200 and the games that were available for it at the time. I had 6K available on it and so could play big text adventures which I spent hours at.

One of the first products that I bought when first obtaining my A500 in 1987 was the Adventure Construction Set.

At the time, I was very impressed with this product and managed to write some small games with it and spent many hours playing the games that were supplied with it. I now look at it in my bookshelf and think what a lot of money I spent on it as I haven't touched it since that first year.

Unwrapping the parcel

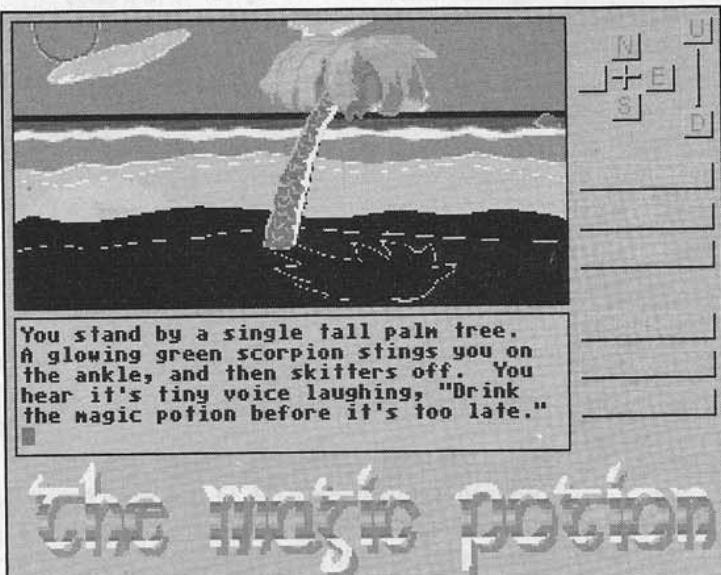
The product from Aegeis was well presented as is customary with this company and supplied with two disks and a manual. One disk contains a harddisk install program which I went ahead and used. Also on this disk are

all the programs that make up the *Visionary* Package. On the second disk are a full featured adventure game and backup files for the tutorial in the manual.

My first complaint is that the install program could have been documented a little better. Apart from this it did work as designed. Even an example showing a default path would have been a lot better for people who are unfamiliar with the Shell environment. Anyway this is a small technical point which they could look at in the future.

Next it talks of the need to install a text editor for use with the program. Maybe one should have been supplied with the product and installed with the installation program. There are many text editors in the public domain and maybe one of the better shareware edi-

An example of a *Visionary* created adventure



tors could have been supplied with details of where to send shareware contributions.

This would have aided people unfamiliar in the shell environment, then again it might be argued that people using this program should be familiar with the basics of their machine.

Let's get into the manual and see what it says about this.

Come inside

Chapter 1 echos what is on the back of the package with a feature overview and product support features. Next is a description of the Compiler and other utilities which are located on the disk.

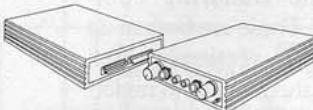
Interestingly, there is also a description of a program called VIE - the *Visionary* Interactive Editor, which allows development of programs in a more friendly environment which would appear to be like the CANDO interface. The only problem with this utility is that it is an optional extra which can be purchased separately. I made some enquiries, but it would seem that this is not available as yet which seems a real shame.

Also in chapter 1 are the system requirements which are as follows: Kickstart 1.2 or later (version 2.x supported), a minimum of 1 Mbyte of memory and 1 diskdrive. Remember as

with a lot of these type of programs, 1 meg will only allow for smallish games to be written and larger games will require more memory to develop. And finally, the chapter concludes with details on your obligations when selling your masterpiece.

Where do I begin

Chapter 2 begins with a small tutorial aimed at the first time programmer which takes you through the basic steps of writing an adventure game with *Visionary*. I worked



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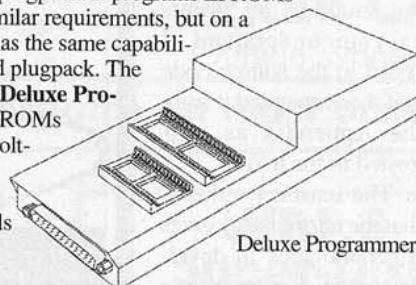
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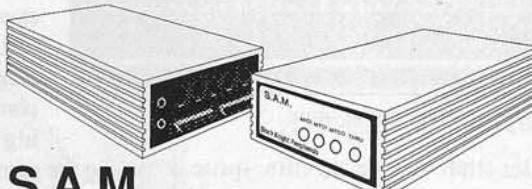
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Deluxe Programmer



S.A.M.

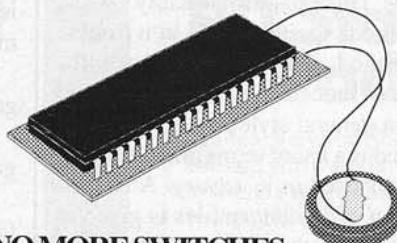
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through this chapter and found it very well written, making all points easy to understand. I typed in the source code and then amended it from the Appendix as suggested in the text.

The reason for this is that the tutorial only gives a general idea in developing each stage, then moves onto the next step. If you go to the trouble of typing in all the source code which isn't really

that much, then you can finish Chapter 2 off by working through the compiling, debugging and linking stages, which once again are explained quite clearly. The linking process adds 200kbytes to the size of your program, so keep this in mind when developing. The final program is a complete standalone product which may be passed to whoever or wherever you please.

Onward we go

Chapter 3 explains the Conventions and File Formats that are used in *Visionary*. This chapter basically covers the methods to enter code in a trouble free method. As in all languages, the Operator Precedence is covered and rules on general style and layout. Also provided is a list of terms and their definitions as used in *Visionary*. A full explanation of *Visionary* files is given in detail with each file's structure being shown. It would be an idea to copy these file layouts to a disk so that you can copy them to your project disk each time you start an adventure. This allows you to just beef out the shells and so save yourself time and also avoid missing steps that are required.

Deeper and deeper

Chapter 4 covers the Utility programs in much greater detail than was done in the tutorial of Chapter 2.

First the Compiler is covered including all the flags that may be set to enhance its operation. It is a two pass

compiler that seems to run quite smoothly giving progress reports as it goes and generating error messages when necessary which are written to a file titled {gamename}.err. These error messages are explained in Appendix A.

The Visionary Debugger is explained in detail listing all the shortcuts that may be used while in the Debugger.

Output may be set to the printer and the Amiga speech used. Variables may be tested at any point in the game for their contents and also provision is made to change the contents of a variable. Lastly the Visionary Linker operation is explained and the three flags which may be set. These flags are as follows:

-i do not generate an icon for this game

-w do not link the word file with the game, keep it separate

-g cause the game to start up in Graphics mode

Defaults for the linker are to generate an icon and link the word file to the program module while setting the resultant program not to start up in Graphics mode.

As we progress deeper still

Chapter 5 covers Variables and Flow control in all the detail and clarity that is required to get a good understanding of their use. Each flow control command is covered separately with examples shown. For people who have had no programming experience before, I

think the chapter covers all you need to know in variables and flow control to enable you to accomplish your goal of writing with this language.

Chapter 6 moves on to the Graphic Handling commands. These are broken up into four sections which makes them easier to understand. Firstly, the commands to use when setting up the program, followed by the commands to use for drawing directly on the screen

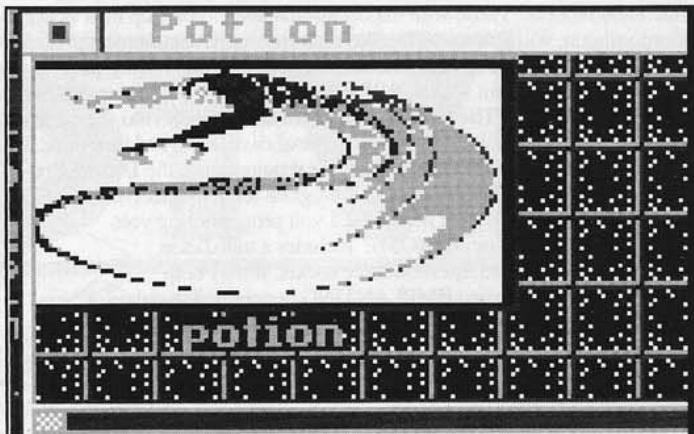
during the game and the Block Transfer Commands which allow moving of sections of the screen for overlaying purposes etc. Thirdly, the Video Effects commands like CYCLE, DISSOLVE, FADEFROM AND FADETO etc which allow for nice display effects during your game. Lastly the Graphic Interaction commands which allow the user to communicate directly with your game by use of the mouse.

Chapter 7 covers the Audio Commands, which allow you to use 8svx sound samples that are smaller than 128kbyte in size. You may load the sound and have it sitting in the background for use when you require it. It may also be cycled continuously as in the tutorial with the sound of the waves and the bird sounds. Music is covered in chapter 8 - MED files can be used as long as the MED.library is in the LIBS directory of the boot disk.

Chapter 9 covers all the general game commands of which there are about seventeen. One of these, the DOS command, allows for the execution of a dos command as if it was issued in a shell. This allows for the execution of external programs, ie a smus player for smus music files instead of the standard MED program.

Into the heart

Finally, we move into Advanced topics with chapter 10 covering such topics as: Optimizing Visionary Code, Arrays in Visionary, Handling Multiple Screens, Animation, Incorporating



Our custom game icon

Player Input. These break down such complex matters as doublebuffering of screens for smooth animations and blitting large portions of the screen. They also give many valuable hints on writing better code that operates faster.

Lastly, in Chapter 11 all the commands are in alphabetical order for easy reference, and it contains an explanation and shows their syntax.

The Appendices finish the manual with explanations of error codes and the source code for the Tutorial. Also the source code can be found on the Catacombs disk. Visionary Utility Programs are covered in Appendix B with Appendix D showing ASCII Codes for use in *Visionary* and Appendix E showing where to gain technical help etc.

What do I think?

This is a very powerful language that is capable of writing such games as *Dungeon Master* and allows for the use of animations and music to enhance the game. The graphics are only limited by your graphic ability as can be seen by the example programs on the disks supplied. A shame the VIE program mentioned wasn't included, but I guess this would have bumped the price up. Hopefully it will be available by the time you read this review.

This program does all it promises and more, so it provides great value for money and is a must for anyone writing adventure games. I fail to see why you would want to torture yourself by writing in any other language ... then again I guess adventurers like torturing themselves. Why else would they play this type of game.

There is also a book available, known as the *Visionary Programmer's Handbook*, by John Olsen who wrote the sample programs on the supplied disks. This book comes with a disk which has a very large game on it and of course all the source code for the game. The book explains the putting together of this game and shows many more helpful routines and hints on producing a more professional game.

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Which Directory Utility?

Part 1

Even with the added functionality of Workbench 2.0, a good directory utility is easily the most often used program on many Amigas. Andrew Leniart examines the current offerings. This month, in Part 1, he reviews Directory Opus and SID 2.0.

Directory utilities are nearly as old as the Amiga itself. DiskMaster was arguably the first to make a major impression with great built in features. It first hit computer store shelves many moons ago and was acclaimed by many as the "it and a bit" of Dir Ute's for the Amiga. It didn't take long for Amiga users to want more though.

While many were content to use such a utility the way the programmers designed it, the majority wanted more. Probably the most important asked for feature was configurability - the ability to set it up to suit yourself and make it look the way you like it.

Timm Martin, author of SID, threw his hat in the ring soon afterwards offering similar features to DiskMaster with a lot more configurability.

Now there are many others following suit making the choice of which directory utility to use harder still. Happily, this is all to the users advantage.

I looked at many directory utilities before writing this review and had a hard time deciding which ones should be included and which should not. Using configurability as one of the main acceptance criteria's, I finally managed to narrow it down to four main contenders. DIRECTORY OPUS, SID 2.0, DIRWORK and DISKMASTER 2.0.

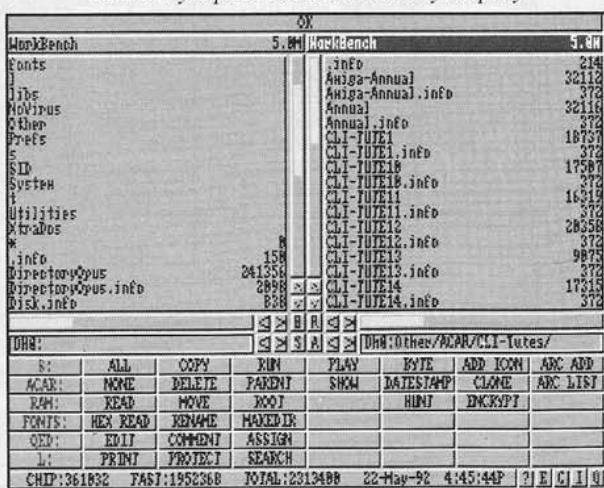
We'll look at what each of these have to offer in that order. The above were successfully used and tested on an Amiga 500 with WB1.3 and 3 meg of RAM. I also tried them on an Amiga 1000 with a switchable V2.04 ROM complete with Phoenix board installed. My thanks to two good friends, Colin Buckle and Steve Offer, for their help and the use of their machines to assist in the review.

Directory Opus V3.42

Author - Jonathan Potter

Bursting with features, like dozens of built in functions which are completely configurable, unlimited files, up to 100 directories in memory at once

Directory Opus: basic 2 directory display



along with full Arexx support. The author of *Directory Opus* claims in the introduction to his manual that his product is in fact, the most powerful directory utility available for the Amiga today. He just may be right.

The Manual

Life, The Universe and Directory Opus is the title of this rather well written ring bound manual. A handy contents index at the front makes it easy to flip to relevant parts you are looking for. The book sits nice and flat when opened on your desk. All manuals should be ring bound in my opinion - they are much more practical to use.

Installation

Installing *Directory Opus* on your hard drive is a breeze using the installation software provided. Double clicking the install icon brings up a screen which allows you to specify the directory you want all the required programs to be installed.

A nice touch is the Help gadget which comes up on the install screen. Selecting this gadget activates the online help mode which then asks you to click on the item which you require help with. Doing so brings up a brief explanation of what that particular item is for and why you would want to install it.

Current *Directory Opus* owners are supplied with a "Convert" utility to save them the need of having to reconfigure everything if upgrading from previous versions as the configuration files have been dramatically changed. Everything ran smoothly from the word go and the software installed without a hitch.

Firing It Up

When you first fire up *Directory Opus* (DirOpus from here on) you get a screen comprising of two windows where directories and files from the selected source are presented. Either window can be the Source or Destination window, depending on

which is the active and inactive one while you are working. Clicking in either window with either mouse button makes it active.

No less than 42 gadgets are to be found at the bottom of the screen, with the far left bank consisting of the current assignments which are made with your startup-sequence. The rest consist of Default gadgets (which are all fully configurable) and a few blank ones where you may define extras as the needs arise. The amount of gadgets you can define is limited only by the amount of available RAM which your system has, so you can theoretically have as many launching gadgets as your heart desires.

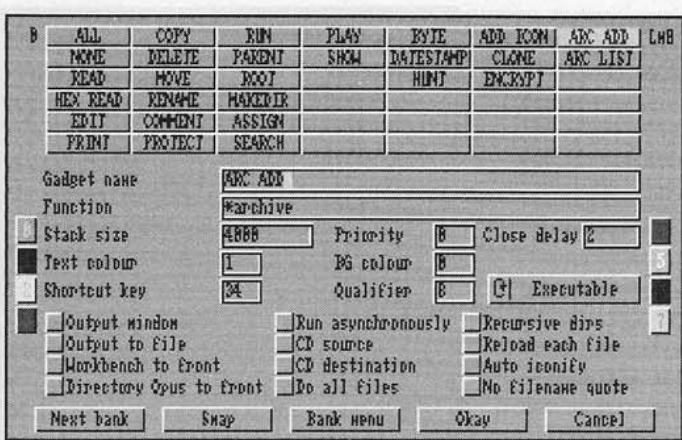
Pick a Drive, Any Drive!

The six drive select gadgets on the bottom left are arranged in four banks one under the other and you access all of them by cycling through them using the right mouse button. This is a good starting point and selecting any one of the assignments brings that particular directory up on screen. From there, just about anything is possible.

Having selected a drive like DH0: you are given three ways in which to

move around the directory and files listing in the source window. Using the right mouse button, you can scroll windows contents up and down simply by holding down the right mouse button and moving it up and down within the window. Likewise, you can scroll the listings sideways to reveal other information about the files by clicking the right mouse button to either side of the window. Same functions can be achieved via the horizontal and vertical scroll bars or by using the arrows on your keyboard. If that's not enough for you, then go to a directory which is crowded with files and press any letter on your keyboard. DirOpus instantly presents all of the files starting with that letter from the top of the active window. What more could a bloke ask for?

It goes without saying that DirOpus



The Directory Opus gadget configuration screen

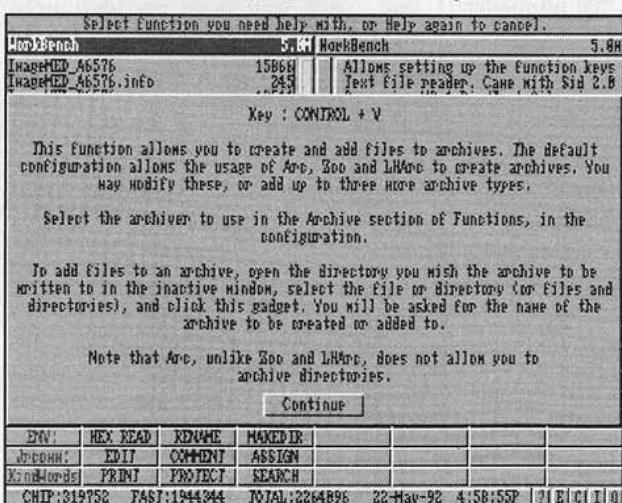
along with all of the other Directory Utilities covered by this review has all of the common features found in a typical directory utility. Delete, Copy, Move, Rename files etc are all there as stock standard so it would be rather pointless to go into each button and its workings in detail. Rather, this review will try to look at some of the not so standard features which each one contains ...

Encrypt

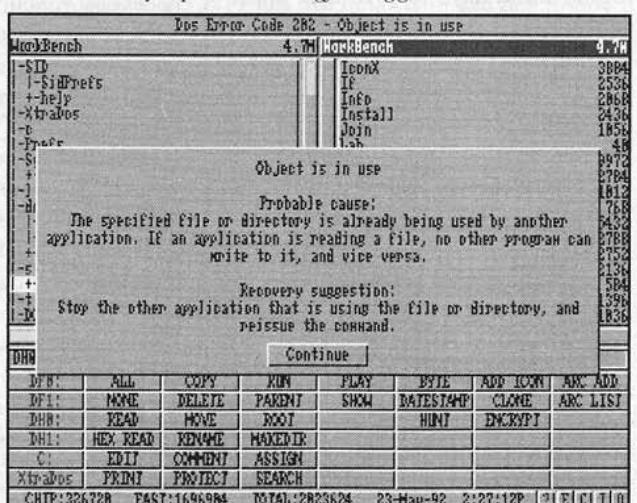
That's what it does! If you've ever wanted to protect a text file so that only those that you give the password to will be able to read and understand it, then this is just the thing to do it with. Selecting this gadget will encrypt all selected files for you with a password which you select.

The files are encrypted with a complex algorithm which most users would find next to impossible to figure. When they try to read the file, they get a screen full of gobbledegook. If however they have the password, then it's a simple matter of using ENCRYPT again at their end with the appropriate switch explained in the DirOpus manual and bingo, it's back to its original state and readable again. A most nifty feature which should come handy to some users.

Directory Opus: Built in help



Directory Opus: Meaningful suggestions to errors



Play

This will play sound files and while it is a pretty stock standard feature in most Directory Utilities, DirOpus Play function has the added ability to play *SoundTracker* and *NoiseTracker* modules. This is made possible by the Stopus.library file which is provided with DirOpus.

Show/Read

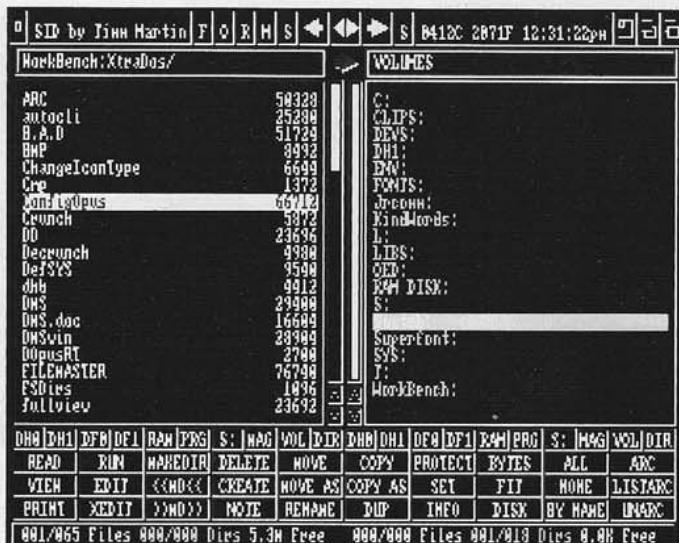
Again found in most Directory Utilities, the ability to view IFF pictures simply by double clicking on them. The difference with the DirOpus show function is that it has the ability to show more than just IFF pics. It will show pics that have been crunched with *PowerPacker*. Nifty is the way that it will also display Icons and Fonts. Double clicking on an .info file brings up a screen showing you what the icon looks like. Press your return key and you see what the icon will look like when it has been selected. Very nice indeed.

Similarly, double clicking on any one of your fonts points or selecting SHOW on them brings up a screen filled with characters depicted in the font of your choice. Makes for an easy way to view your collection of many fonts painlessly and quickly.

Read on the other hand also has the handy ability to be able to read text files which have been crunched by the *PowerPacker* cruncher. A lot of text files are being put on disks in a crunched format these days to save disk space and most seem to be using *PowerPacker* to crunch them with. Clicking on such a text file and selecting the Read gadget is a painless and time saving way of viewing the text file, saving the need to first uncrunch the file to be able to view it.

Add Icon

If you have a few entries in the DirOpus source window without icons and wish to add icons to those files or directories, then this function does just that for you. DirOpus automatically senses the type of file which you want



SID: The main interface

to create the icon for and creates an appropriate one for you.

You can of course define via DirOpus' configuration utility the exact icon which you wish to be appended for a directory, tool or project, however DirOpus has default icons all ready to go for you to save you the trouble if you're not fussed about how a drawer or project icon for example should look.

Tiny Gadgets

Along with the abundance of user configurable gadgets are a series of non user definable gadgets called Tiny Gadgets. These are non configurable for a good reason as explained in the manual. They activate some useful and necessary functions, so that no matter what your configuration, these particular functions are always available. Provided as a type of insurance, if you're first attempts at configuring DirOpus go drastically wrong, then you will always have a way of undoing what you have done. This is a good safeguard for new users that may make the mistake of configuring their original disk.

Help

The other two which demand a mention are the Help gadgets. E brings up a requester which allows you to enter any DOS error code which you may be get-

ting. The result is an explanation of what that error code means, a description of the probable cause of the error and suggestions on how to solve the problem. An excellent and most useful addition which is bound to save hours of time by eliminating the need to search through dos manuals.

Clicking on ? or by pressing the Help key on your keyboard puts DirOpus in Online Help Mode. As long as you selected to install the DirectoryOpus.HLP file when you first installed the utility on your hard drive, you can get on the fly help on any of DirOpus' many gadgets simply by clicking on them. A window pops up and gives you a description of what a gadget is used for and what's its keyboard shortcut if it has one. Very well done and definitely worth the space the .HLP file takes if you have the room. Note that this help file is also configurable, so if you have created unique gadgets of your own, you can edit the .Hlp file to include them and / or edit existing gadget help text to boot. Great stuff!

The Menus

More goodies can be found via DirOpus' pull down menus. Two are already set up for you with Defaults, though you have the option to set up another 100 options via the Configuration program. A couple of the interest-

ing default menus are the Disk Copy, Format and Install menus.

DiskCopy brings up a window which will do just that, copy disks for you From/To any of three external drives connected to your Amiga. You have the option of turning Verify off/on to increase speed of copies. Likewise, Format will prepare your disks for you via any floppy drive you have connected. Disk names can be defined for each separate drive and all of the Amiga Dos format options are available such as Quick, Verify, Noicons and FFS with the click of a mouse button.

Archiving

File archiving is fully supported and is totally configurable. Three come set up as default for DirOpus, being Lharc, Arc and Zoo. Three more can be added though the appearance of new archivers all the time makes me wonder if extra three will be enough for some users.

Conclusion - DirOpus

It would be easily possible to write twice the amount I've written here about *Directory Opus*. I've tried to point out the features which I found particularly useful in this review, however there is a lot more to this utility than first meets the eye. Whatever it is you could want from a directory utility is either already made possible in DirOpus or you can configure it to do what you want.

The only couple of minor shortfalls I found with it was that in some circumstances, I could not modify the actual display as well as I'd like to. For example, while the colours of gadgets are fully configurable, their size is not. On Steve Offer's Amiga 1000 with flicker fixer fitted, DirOpus gadgets were leaning a bit towards the too small side in interlace mode. It would have been nice to be able to adjust the size of those gadgets so that they were just a tad bigger, as you can with SID.

An alternative fix was to have a blank gadget in between used ones to give more space and make selection a bit easier. This effectively halves the gadgets on screen at any one time, however, so defeats the purpose somewhat.

At day's end however, I found DirOpus to be superior to any other similar product I have used. The features just outweigh the minor shortfalls and the program worked flawlessly for me with no evidence of any bugs. I've personally been a die hard SID user for a couple of years now. This version of *Directory Opus* may just change that.

Review copy supplied by Jonathon Potter, Left Side Software, PO Box 289, Goodwood, SA 5034, (08) 293 2788. RRP (for new version) about \$130.

SID 2.0

Author - Timm Martin

SID 2.0 was a long time coming and many people (including myself) were

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convinced that it would never get here. Sickness and other problems for the author hampered its production and its promised release date was continuously put off over the last couple of years. It did finally make it here however and has proven well worth the wait. V2.0 of *SID* is an update to the last released version, which was V1.6.

Manual - What Manual?

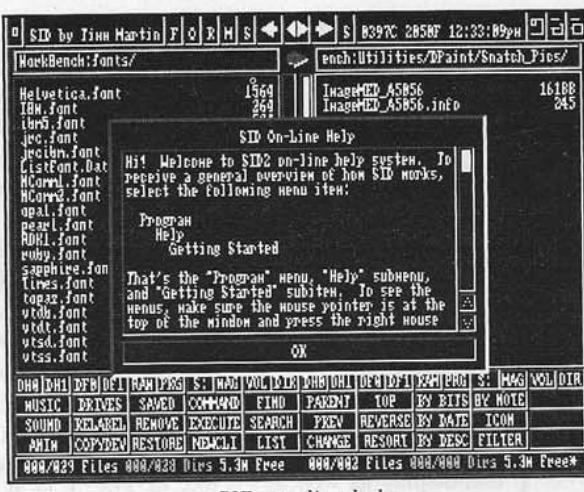
Clicking open my copy of the registered users distribution diskette, the first thing I went for was the Doc file to see what was new since v1.6. I was disappointed when I found that the first 250 lines of *SID*'s disk-based 600 line manual are taken up with legal jargon and pleas from the author to register the software if you like it. Also included was an in-depth explanation as to why V2.0 took so long to be released. There was no list of new features to be found, however, so it was up to the user to explore and find them for himself.

The rest of the doc file consisted of basic instructions of how to get *SID* up and running initially and a trouble shooting guide if things went wrong. Despite the lack of manual however, most people should be able to work their way around most of *SID*'s neat features with a little perseverance.

Getting Started

There are two versions of *SID* provided on the distribution diskette, one for WB 1.3 users and the other being WB 2.0 specific. Both versions have two copies of the actual launching program which differ in memory requirements.

SID2-Personal runs a compact version of the program which contains all the basic features of *SID*, only will not edit or save any preferences. This version is meant to be used once you have configured the program to your satisfaction.



SID: on line help

SID2-Professional has the drawback of using a bit more memory, but retains the ability to configure *SID* at any time and is able to save your preferences. While I can see Timm's logic in providing two separate versions, it is not as practicable as one might hope. If you wish to make a change in your configuration on the spur of the moment, it's a pain in the proverbial to have to go and start up the other version to make that change. For that reason, I found myself using *SID2-Professional* all the time and paying the expense of it using a bit more Ram.

Upgrading 1.6

The way *SID2* creates its configuration files is a lot different to the way previous versions did it, so a convert utility which doubles as installation software is supplied to read your existing sid.config files and convert them over to the new format. I had a bit of a hard time getting this to work with my set-up and was successful only after altering my set-up to a stock standard WB1.3 set up. This was probably the fault of one of the many third party utilities I like to run and nothing to do with the installation software provided.

Installation

Once up and running, the installation software was very user friendly indeed, eliminating the need for a comprehensive manual to work by. Just like

with DirOpus, online help was available at any stage of the procedure and you are able to select any directory or hard drive partition you wish for *SID2* and its support programs to be installed in. The whole procedure worked without a hitch. So far so good.

Up and Running

SID2 does not detach itself from the CLI so launching it via the CLI requires the use of a specially written "runback" command supplied with the software. This is no drama and works quite

well. Your mountlist must also be modified to include mounting the Null: device, yet this is made easy via the example mountlist entry supplied on the diskette as well. I just used my text editor to cut and paste the entry into the mountlist and edited my startup-sequence to mount the device at every boot up.

Once all that's done, it's a simple matter of double clicking the Icon. This is where *SID2* has taken a bit of a backward step. It now uses IconX to bring up a CLI window to launch the program from when starting via an icon. This slows down the initial loading of the program.

The looks of the program have not changed a great deal since V1.6, however its capabilities have been enhanced tremendously. There are some extra built in buttons which are very handy indeed and we'll look at those in a moment.

Configuration

Configuring *SID2* takes some getting used to and with the lack of a manual to follow, is a bit of a hunt and explore expedition. Selecting Help > Getting Started from the pull down menu gets you going but could still prove a little frustrating to a first time user of the product. Configuration mode is fired up by selecting the appropriate pull down menu, from where anything and everything seems to be configurable. It appears that the banks

of gadgets one can have are only limited by the amount of system memory, as are the amount of Pull down menus you can define.

Colours, fonts buttons and paths are all fully configurable right down to the size of the gadget buttons which can be a handy feature when working *SID2* in interlace mode.

Online Help

Online help is catered for very well in *SID2* and can be accessed by holding down a qualifier key and clicking on the gadget you need help with or selecting the appropriate pull down menu. Even *SID*'s requesters are covered in the online help feature by pressing the Help key on your keyboard when presented with one. Very nicely done.

Supplied Buttons

At the top of the window are five gadgets or buttons each defined to perform a certain function.

FORMS. Clicking on the F key turns Sid's filter mode on. According to the online help, you are supposed to be able to filter out certain files according to a wildcard criteria when working with a batch of files. At time of writing, I still have not been successful in using this function as for me, the instructions given on its use in online help are not clear enough.

The O button forces *SID* to open a CLI output window which is handy when launching a program from within *SID* that is failing to run correctly. By opening an output window, one can read any Dos errors that come up when trying to run a program and get to the bottom of where the error is.

R is used to force SID to display an "input requester" for any commands or programs you wish to run, giving you the opportunity to enter different required parameters for different situations.

Potentially handy is the M

button which gives you the opportunity to decide on whether or not you wish a file marked or highlighted after you have finished looking at it when working with multiple files.

Directory buffering is also catered for by *SID*, though handled in a much different way to the others. By selecting the S button, *SID* will remember each directory you select and work with. It keeps the directory information in memory so that if the need to go into that directory arises again, the list is displayed from memory, saving constant disk access. A very handy feature when working with floppy disks that contain imbedded directories which speeds up the work time dramatically.

Finally, an iconify function is also provided so that you can have *SID* shrink to a small window displaying various information and awaiting the time when you need it again.

Copy Protection

While copy protection is non-existent in any of the directory utilities reviewed here, *SID* has built in a unique and very good incentive for registered users to not give their registered copies of *SID2.0* to others. When you register *SID*, you must supply your name and address in order to receive your registered version. Timm Martin hard codes this information into the registered copy of *SID* you receive so that when the registration details are selected from the pull down menu's, your full name and

File information provided by SID, including file type recognition

The screenshot shows the WorkBench: XtarDos interface. At the top, it displays the path SID by Tim Martin [F O R H S] and the status 04BBC 164AF 01:00:26pm. Below this is a menu bar with 'WorkBench:XtarDos/'. The main window contains two panes. The left pane shows file details for 'ImageHDD.B5B56':
- Name: ImageHDD.B5B56
- Type: ImageHDD.B5B56.info
- Size: 16188 bytes
- Date: Monday, 15 October 1998
- Time: 01:49:00am
- Status: Executable program
- Note: Mouse driven .3ip archiver/extractor. The right pane lists other files:
- ImageHDD.B5B56.info (size 245)
- ImageHDD.B5B56 (size 17806)
- ImageHDD.B5B56.info (size 245)
Below these are icons for P (Phazip), D (Disk), E (Edit), and R (Read). The bottom of the screen has navigation buttons: PREVIOUS, NEXT, and STOP, along with a status bar showing 000/000 Files 000/000 Dirs 5.2M Free*.

address are shown as the rightful owner. Quite a clever trick as it also serves to discourage owners from legally selling their copy of the program and possibly result in more registrations of the product. Whether or not it works is something which only time will tell.

In Conclusion - SID

There are quite a few goodies provided with *SID2* but the biggest problem is sitting down and finding out that they are there. While the online help function is very good, it does not replace a well written doc file which can be printed out and referred to in the early learning stages. I get the feeling that this may have something to do with the pressure which was on Timm Martin to come up with the goods and that a manual may be forthcoming in a future update of the software.

To my mind, one of the biggest things *SID* has going for it is the fact that it's a try before you buy product. It leans more towards crippleware rather than shareware as of this release, as the freely redistributable version will not save your preferences. However despite this, you can still obtain a fully working version of it, set it up and use it for a while to see if it's going to suit you or not.

With *SID* looking so similar to its commercial counterpart *DirOpus*, this fact combined with the slightly lower cost of registering it over buying *DirOpus* could be just the edge it needs.

It's not just the logic it needs to sway someone over to buying it rather than the other. If it does, then good luck to Timm I guess. He's made a hell of an effort with this release and deserves some support. I used my own copy of *SID2.0* to do this review and certainly have no regrets about purchasing it. *SID* has served me well for a long time now.

Get your copy of *SID2.0* from Timm Martin, PO Box 3205, Cincinnati, OH 45201 U.S.A Registration Cost \$25 US Dollars or check out any PD library for a try before you buy copy. □

Amiga Aided Speaker Box Design

Daniel Rutter compares three programs for designing your very own loudspeakers, all from the comfort of your very own mouse.

I build speakers. It's not a major industry - more of a profitable hobby - but Andrew Farrell, the editor of this magazine, uses a pair I built, as does Tim Strachan, editor of Megadisc. I like to think of myself as relatively knowledgeable in the field, or at least able to bluff plausibly.

Building speakers is not just a matter of taking a box, whacking one of those conical things in it and Robert's the brother of one of your parents. Designing the two most popular and easy to build types of speaker enclosure - infinite baffle and ported - requires a veritable army of equations and a forest of cryptic quantities, most of which are laid out like this:

$$ad = \frac{(h^2 - b^2)(b^2 - l^2)}{l^2(h^2)}$$

$$a+d+1 =$$

Anybody who saw at once that this is how you calculate delta for a passive radiator, write to me and receive your free "Swot of the Decade" button.

Now, it's quite possible to do all this stuff on paper. If you're only building one pair of speakers, this is not terribly annoying. If you're like me, though, doing it all on paper will have you talking to vegetables in a quiet corner in double quick time - not to mention making expensive errors more than likely.

Which is where your friend and mine, the good ol' Amiga, comes in. There are no fewer than three programs available for the Amiga which will help you through the mathematical obstacle

course. The three are called *SpeakerTools* (ST), *SPICAS* and *SpeakerSim* (SS).

SpeakerSim may be found on Fish 340 as a demo version, *SpeakerTools* is ShareWare (US\$25 for private users, US\$50 for commercial applications) and *SPICAS* is a locally designed program with a registration fee of \$30. There is another Amiga speaker design program, called something like *SpkAmiga* as I recall, but its American author has not yet sent a copy for review.

SpeakerTools

SpeakerTools is not a new program - it bears a release date of 1989. And it's

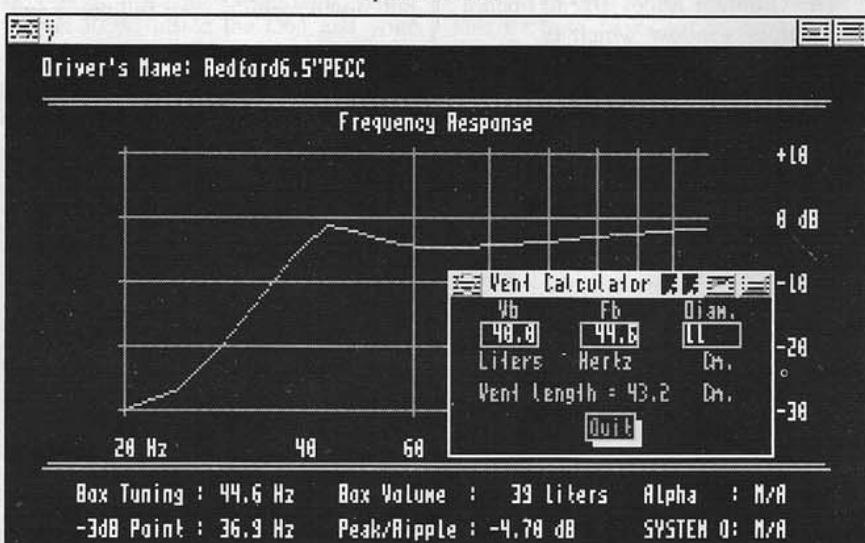
not initially very impressive, eschewing pointless frills for a simple and comprehensible user interface. Like the other two programs, it is designed to allow the calculation of infinite baffle (simple closed box) or Thiele-Small ported enclosures only.

Since this is as far as most home constructors are likely to go - other enclosure designs being far more complex to build - it's quite adequate. The program will use metric or Imperial units, runs quickly and will generate bass response plots for comparison of different enclosures. A good, quick 2 and 3 way crossover designer is also included, which in the registered version allows calculation of passive filter orders other than second and of active filters.

There is also a Find Parameters feature for drivers whose characteristics are not known or whose manufacturer's figures are dubious - as they often are; many manufacturers seem to have done their driver testing in an underwater public lavatory on the planet Zarg. You need all the usual test apparatus (test box, audio oscillator, frequency counter, bench amp and DMM), but any program which could avoid this paraphernalia would be worth its weight in platinum.

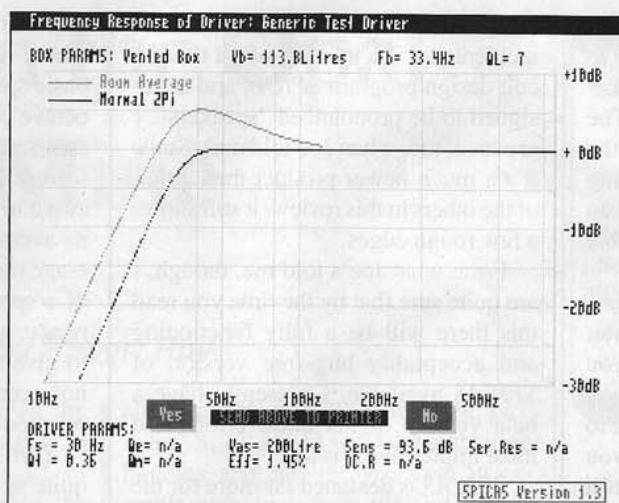
SpeakerTools has a few shortcomings, though. For example, its input filter is not dreadfully selective and such features as the port length calculator are

SpeakerTools



prone to producing stupid answers - negative port lengths will result from inappropriate diameter inputs, for example. None of these really slow the program down, but they could be improved upon. It's also not averse to the recommendation of enormous boxes for ported set-ups (how does 8000 litres grab you?) when asked for an optimum calculation. Fortunately, this can be manually circumvented.

A quite common situation for the home constructor - I've struck it a few times myself - is a person with a pair of elderly and dishevelled speakers which nonetheless have perfectly sound boxes and need a rebores with newer drivers. Now, audiophiles tend to be highly unimpressed at the concept of drivers being slapped into a box for



SPICAS

which they are not suited, but it has not yet been known to bring the owner out in boils or cause cancer in rats and so I'm happy to do it.

Not with the help of *SpeakerTools* though. It's first and foremost designed

as a quick and simple way to get your speaker's vital statistics on the screen easily, and working equations backwards ("What if I took these old boxes and put in a port? How long would it have to be?") is a no-no. Overall, the program's just not very polished, but the beauty of the shareware concept is that if you get it and are not impressed, you're not out of pocket and you can wipe the disk with minimal agony. Overall, a good, simple, straightforward program which should be adequate for most people.

SpeakerSim

SpeakerSim is an altogether fancier deal. It is primarily designed for modelling ported enclosures, but will do sealed ones just as happily. Where it stands out is its user interface, which makes it simple to see trends in speaker characteris-

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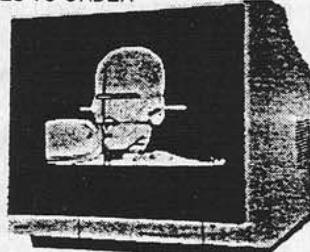
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tics by the use of its multiplot mode.

What this does is allow the user to specify one characteristic of the speaker to vary within a prescribed range. The program will plot 14 graphs of the speaker's performance with differing values of this characteristic, so you can see the complete envelope of possible results.

This comes in handy if you're entering volume construction of a particular type of speaker. From experience, you know the resonant frequency of driver x varies in each batch from say 25Hz to 28. By using the multiplot mode, you can see exactly what end result you'll get.

On top of the usual small signal plots, *SpeakerSim* will happily also deal with maximum power, cone excursion and thermal plots, and multiplot can of course be used with all of these too. The small signal plot is the most useful, but the others come in handy.

The full version of *SpeakerSim* includes a comprehensive passive crossover designer (active crossovers are probably a little beyond the home constructor, anyway); the demo version has this feature disabled.

Pleasantly, *SpeakerSim* isn't allergic to speaker modifications, and will happily allow you to run your equations in any direction you choose. Multiplot mode is particularly useful here - how should you tune your enclosure, whose dimensions you already know, for your new driver? The trend is easily traced.

On the down side, *SpeakerSim* will only run in Imperial units, something of a pain. But that aside, it's a great package.

SpeakerSim shows the benefit of its ten years of development - it started on a minicomputer in 1980 and the first Amiga version hit the streets in 1988. It's smooth, polished and quick, does what you ask it when you ask and is aesthetically pleasing on top of that. Highly recommended.

SPICAS

The most recent offering on the Amiga speaker design scene is Bjoern

(Joe) Rasmussen's *SPICAS* (the name, incidentally, is a joke rip-off of the circuit design program *SPICE*, and is designed to be pronounced "speakers"). I groaned, too, when Joe told me). Since it's a much newer product than either of the others in this review, it still shows a few rough edges.

From what Joe's told me, though, I am quite sure that by the time you read this there will be a fully functioning and acceptably bug-free version of *SPICAS* available. I presently have a beta version of his latest effort, and most impressive it is too.

SPICAS is designed far more for the semi-professional constructor, and contains a lot of features to make life simpler for such people (I am becoming more and more enamoured of it). It will do everything SS manages, except for multiplot, but on top of that it also offers a host of alignment choices for box construction.

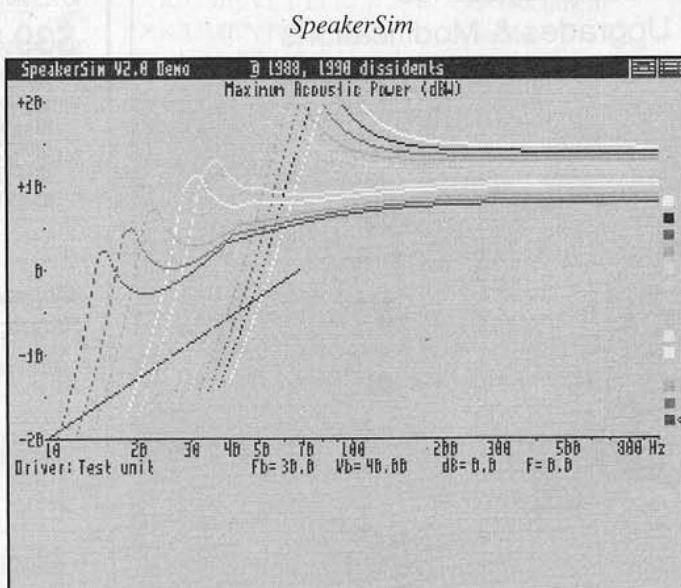
This allows particular box alignments to be easily and VERY quickly selected from a collection of simple buttons, without all the mucking about to get the right combination of box volume, vent length and crossover type. There is provision for nine discrete alignments, nine non-discrete alignments, six quasi-alignments, sealed box and custom options.

At any point you can bring to screen or dump to the printer (using the stand-

ard Workbench GraphicDump utility, which works very well) the speaker's basic specs, its 1/6th, 1/12th or 1/24th octave output or its low frequency response plot. And this plot includes a feature I've not seen before - a second curve in the low bass register, showing its average in-room response. The average room will actually add to the bass of a speaker thanks to its innate resonance, and this takes that into account to give a truer response plot for those not accustomed to listening to music on a football field.

SPICAS' plotting routines are not quite as fast as *SpeakerSim*'s, but are still no slouch and are certainly more than acceptable even on a 68000 machine. Another legacy of *SPICAS'* being programmed in GFA-Basic (I presume this is the source of the problem) is that it constantly accesses RAM even when just sitting in the background. This can very drastically slow down other programs relying heavily on RAM read/write operations, and is having a noticeable effect on my word processor as I type. My spelling checker slows to a tenth of its previous speed.

Apart from these small problems, *SPICAS* is pretty robust - it is possible to crash it, but you can't do it with just one nonsense value as was possible on earlier versions. Now you have to make a concerted effort to enter four kilometre high speakers, drivers handling ten



terawatts and vent diameters visible only to an electron microscope. One glitch no longer makes a guru.

The whole program hangs together well and works smoothly. Everything is where you'd expect it. And, in a major selling point, Joe's easily available for support and sales, which is a change! When I saw his name, I was positive he was some Norwegian walrus farmer who'd want registration in Mayan stone currency and only communicate via carrier pigeon, but fortunately he sounds about as Nordic as Derryn Hinch and lives in Sydney. If you're interested, send enquiries to Boern (Joe) Rasmussen, Custom Analogue Audio, Unit 10/28 Garfield St, Carlton NSW 2218. Or phone him on (02) 588 6040.

Good Reading

A quick note - Joe recommends Vance Dickason's *Loudspeaker Design*

Cookbook as a valuable text for the speaker designer. I own it and a redoubtable tome it indeed is. However, those starting out in the field will be well and truly baffled by the reams of algorithms and ready reckoning tables in the LDC's pages, and for them I'd recommend V. Capel's *An Introduction to Loudspeakers and Enclosure Design*. The most complicated thing about this book is the title, and it contains clear and concise descriptions of how the whole field hangs together for which the beginner will be deeply grateful.

Which Speaker Designer?

On the whole, *SPICAS* is the newest and the best of the three programs, the balance being tipped by its reams of alignment choices and its local support, which has to be a major plus in a field which often leaves the Australian

enthusiast feeling like a Belgian tourist stuck in the middle of the Simpson desert with nothing but a box of pretzels. By all means, test the lot - you're breaking no laws - but I think you'll probably gravitate towards the Australian product.

And just before I go, a quick plug. If anyone wants some speakers built but has little inclination or equipment for doing so - they need a fair degree of woodworking expertise on top of the mathematical acrobatics - feel free to write to me at:

4 Clare St, Gladesville 2111.

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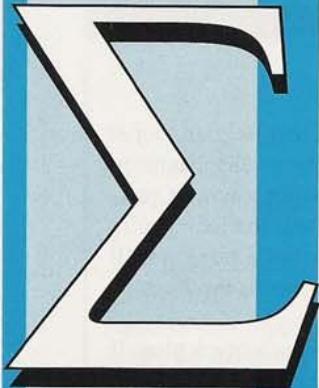
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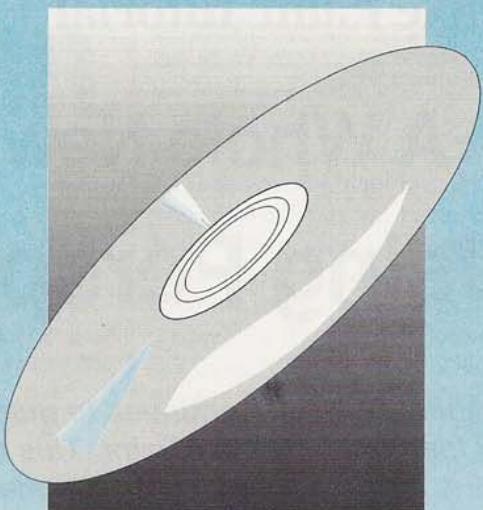
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Deluxe Paint Tutorial

A Whole New Slant Using Perspective

Graham Bowden continues to guide us through the many features of Deluxe Paint. This month we check out perspective mode.

The perspective feature of *Deluxe Paint* is something that needs to be thoroughly understood by both the still life artist and the animator. Those who deal in portraits and paintings need a thorough grasp of the subject to be able to extract consistent results in their art.

The cartoonists among us should also be aware that when they instruct a brush to gyrate across the screen, *Deluxe Paint* digs into its bag of perspective tricks to align and place the brush. And, dear and gentle readers, just because a pair of brushes have been rotated through identical angles doesn't mean they will match one another when stamped down on the screen. Before dealing with that conundrum, however, here's a little keyboard trap which often trips the unwary.

Using the Numeric Keypad

Take a look at Figure 1. It's not for nothing the numerics keypad numbers are coloured the way they are, nor are the + and - signs a mistake. Those red, green and blue keys are so marked because, undocumented though it appears to be, the RGB values of the current foreground colour can be adjusted up or down one increment per key tap.

Regular *Deluxe Paint* users will recognise that these are also the perspective rotation keys and as such are the sole means available to adjust the angle

of a brush in Perspective mode. You can see the problems which will arise when an ardent artist steps out of Perspective mode without realising he/she has done so.

Perhaps the brush tool was selected to grab a new custom brush and bingo!, Perspective is turned off. Now with the new brush attached to the mouse an attempt is made to rotate it in perspective, only instead of the brush rotating as expected, one of the screen colours begins changing.

Unknowing artists have been known to rip their mouse's ears out in frustration while their little grey cells attempt to comprehend the incomprehensible. But you are now knowing artists. To experiment, ensure Perspective is turned

off, then select the Palette requester, choose any colour as the foreground colour and tap away on the numerics keys.

Watch the RGB sliders. Interesting isn't it? Unfortunately the "Restore Palette" option from the Color menu will not restore the colours if the numerics keys have been tapped more than once. Okay enough of that, you've been warned now so beware.

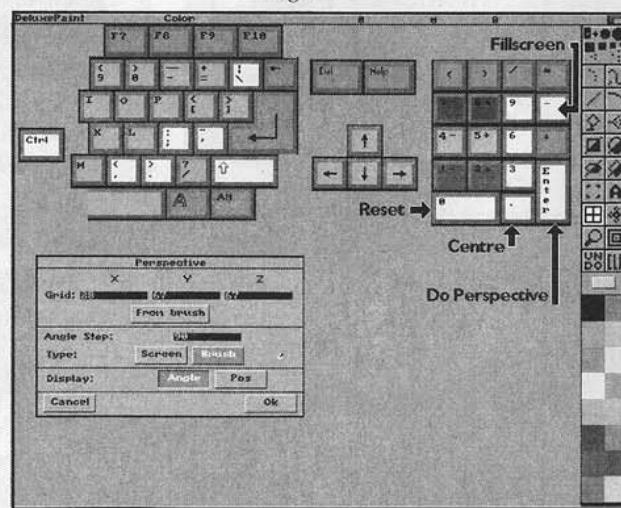
There is one thing however. For those Amiga owners using one of those nasty numerics pad-less A600s there is a work around to adjust a brush in perspective. More later.

Using Perspective

Perspective, which adds depth to a picture, can be surprisingly difficult to draw accurately using conventional painting methods. Naturally *DPaint* is fast, clean and simple when it comes to dealing with these difficulties. Press the numerics keypad "Enter" key and you move into the angular world of perspective. The *Deluxe Paint 4* manual gives an excellent run down on this feature, but like all such publications it can't cover everything. Let's try to clear up a few grey areas, shall we?

A few keypad keys carry the same function as the Effects/Perspective menu items and these are shown in Figure 1. The zero key, if pressed alone, will simply reset all perspective angles to zero but if pressed in conjunction with the

Figure 1



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<Shift> key will reset all settings including angle step, angle type, menu bar display and modified viewer position to the default settings. More on the modified viewer position a little later.

The 9, 6 and 3 keys reset the X, Y and Z axes independently to zero, but a little magic occurs if <Shift>-9 or <Shift>-6 are pressed. Here's how it works. Grab a brush, enter Perspective and press the backslash (\) key. Pressing this key changes the menu bar numbers at the top of the screen to show perspective "Pos"(ition) rather than the default perspective brush "Angle".

Make sure the brush is not directly over perspective centre by ensuring those numbers are something other than zero then press <Shift>-9. Now move the brush horizontally on the screen. Watch the numbers in the title bar and you'll see the brush is no longer moving along the "X" axis. It is instead moving along the "Z" axis either into or out of the screen depending on which way you move the mouse.

If <Shift>-6 is pressed it's the "Y" axis which remains stationary while the brush moves along the "Z" axis as the mouse is moved vertically on the screen. Figure 2 shows what happens with the "Y" axis fixed. To unlock the axes press numerics zero. By the way, holding down the "Ctrl" key while drawing will also temporarily fix the "Y" axis.

Perspective Requester

With the Perspective requester being called up via the menu or by right clicking the "grid" tool when in perspective mode, let's look at the several buttons

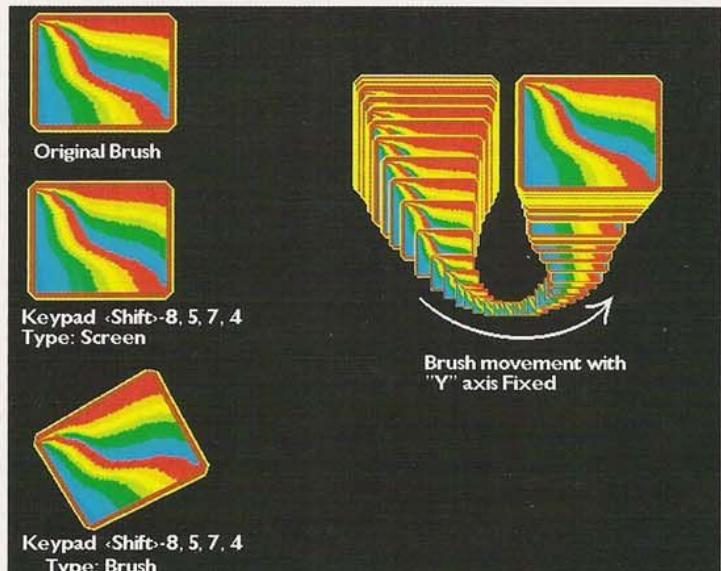


Figure 2

and settings within it. Keeping in mind that your brush can be moved about in three dimensional space while in perspective mode the "Grid:" function now has three axes of action.

By default the grid spacing will be adjusted to the dimensions of whatever brush is attached to the mouse when Perspective mode is entered. If it was a built in one pixel brush the grid will be one by one by one but if it was a custom brush the grid could be anything.

In our case in Figure 1 it happened to be a 28 x 67 pixel custom brush. The

"Z" grid dimension will always equal the brush's "Y" dimension. When activated the grid works just as it does in normal painting mode only now the brush can step along the "Z" axis. To force the brush to step along this axis either the "X" or "Y" axis will have to be fixed and we've already learned how to do that.

The only variation to this grid rule occurs when either the semi-colon (;) or quote (') keys are pressed. These keys respectively step the brush out of or into the screen when pressed. If the

screen is in Hi-Res the steps will be 8 pixel increments, if in Lo-Res they'll be 4 pixel increments. They will continue to step the brush by this 8 or 4 pixel amount even if the Grid tool is active. Pressing <Shift>-; or <Shift>-' will step the brush along the "Z" axis according to the "Z" grid setting so if 4 pixels in Lo-Res is more than required simply reset the "Z" grid number to less than 4.

Type

The angle step in the Perspective requester refers to the amount of rotation caused to the brush whenever a rotation key (numerics keypad 7/8, 4/5, 1/2) is pressed in conjunction with the <Shift> key. The usefulness of this feature will be shown in a future article dealing with animation. That's later, for now we'll move on to the "Type:" buttons. As with animation, a brush in perspective can be rotated in relation to the screen plane or its own plane.

Unless the monitor is physically picked up and tilted the screen plane never changes so the

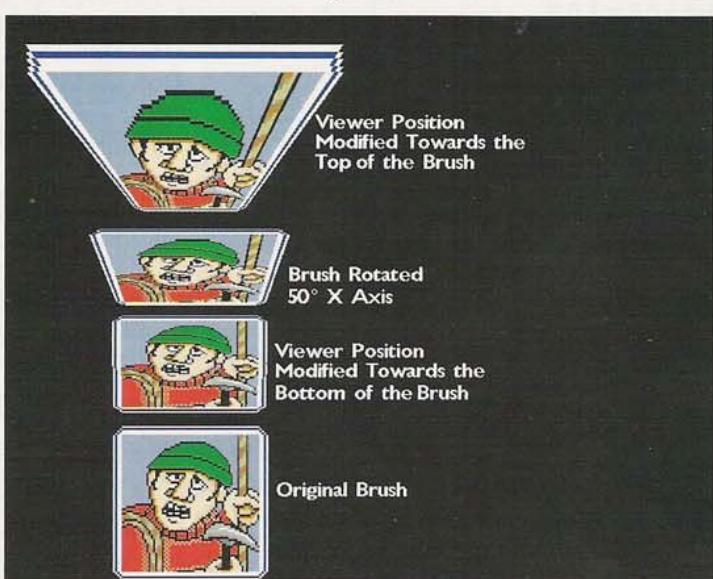
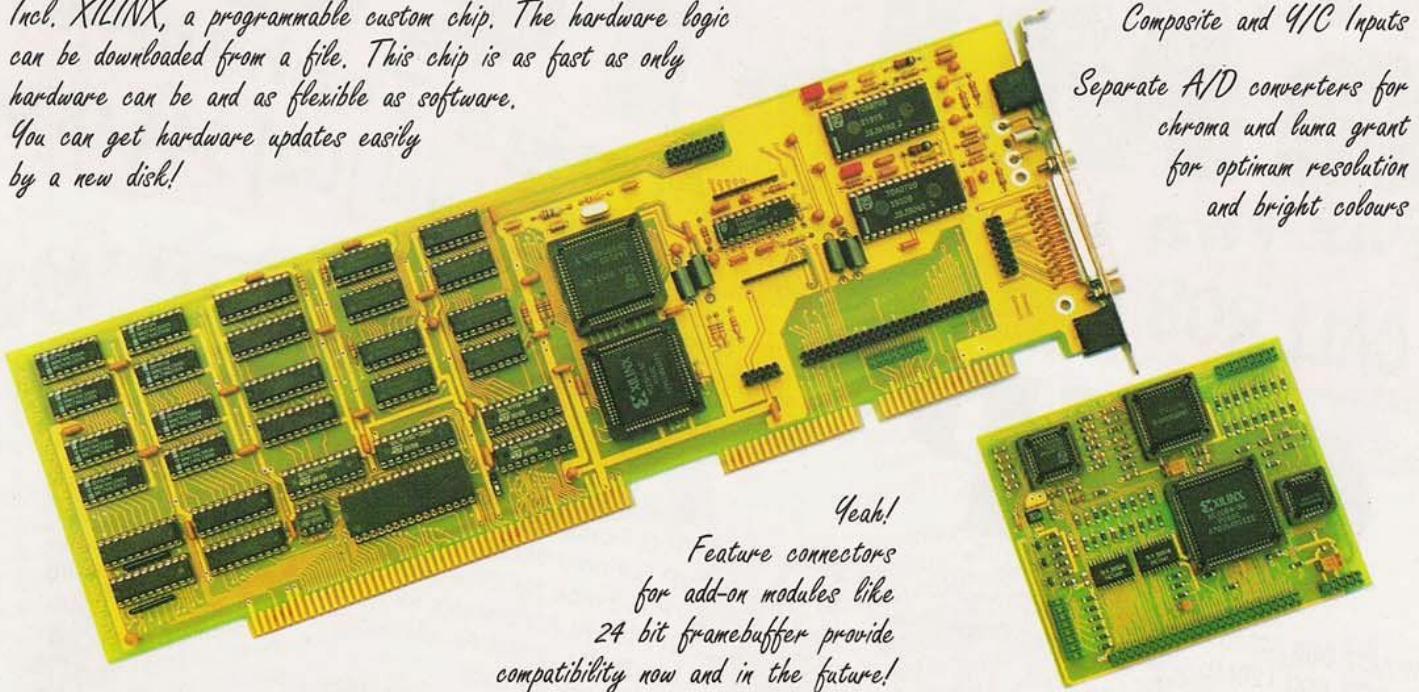


Figure 3

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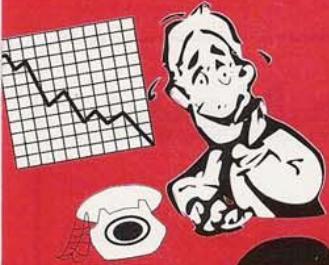


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plane of reference for brush rotation in "Screen" type is a fixed value. If the plane of reference is "Brush" type however the reference changes each time the brush is rotated. In Figure 2 an "Angle Step:" of 45 degrees was set, then the brush was rotated using the sequence shown.

The brush rotated in "Screen" type ended up in the plane from which it started while the brush rotated using its own position as a reference ended up as shown. Why? Because the second brush was rotated according to a constantly changing (by 45 degrees per step) reference plane. It had to end up in a different perspective, it was following a moving target.

Try picking up a stray disk from your computer desk and rotate it roughly 45 degrees backward then 45 to the left followed by 45 forwards then 45 to the right. If all rotations were taken in reference to an imaginary plane in front of you the disk will have ended up back where it started. On the other hand if you tilted the disk according to its spatial position it will end up as the one in Figure 2. You figure it out.

Display

The "Display:" buttons we roughly dealt with above and the manual is pretty straightforward about them in any case. Moving back to the keyboard then, what of the greater than and less than (< >) keys. Pressing <Shift>-comma and <Shift>-period causes the position of the viewer in relation to the brush to be modified.

To understand the mechanics of this feature grab that stray disk again and try the following. Hold the



Figure 4

disk in front of and level with your eyes and tilt it forward about 45 degrees. Now move the disk downwards until eventually you're looking almost parallel to its spatial plane. You've modified your viewing position just as *Deluxe Paint* does.

Move the disk upwards and eventually you're looking almost straight at the surface of it. Once again you've modified your viewing position. Figure 3 illustrates this feature.

This effect can also be emphasised using animation. Try modifying the viewer position as in the top brush in Figure 3 then, while remaining in per-

spective mode, spin the brush through 360 degrees on its "Z" axis over about 20 frames. You get the idea.

Hints and Tips

Some more hints. Pressing the minus (-) key will usually cause *Deluxe Paint* to fill the screen with the current brush in the current perspective attitude. I say usually as occasionally, if the "X" axis in particular has been modified, the "Fill Screen" feature refuses to work. Simply click the brush down after the perspective adjustments are made, undo that action and next time

"Fill Screen" is selected it'll work.

When rotating brushes, to be sure of uniform results when several brushes are being rotated through the same angles, make it a rule to always place the brush over perspective centre when adjusting. Figure 4 illustrates the differences which can occur if brushes are rotated 45 degrees in varying screen locations.

Brushes A, B and C were rotated where they stand with the perspective centre located directly under brush A. The differences are obvious. Further, when brush A was moved to brush C's location it became considerably larger, being represented here as brush D. The importance of this rule will also be demonstrated in an upcoming animation article in which we'll animate a cube in realistic 3D.

For now turn to the Checkered Lady. Although another paint program was used to create the colourised lady's face and the lower marblesque rectangles, *Deluxe Paint 4* was crucial to the final product. The background consists of a square brush containing the basic six segments of the pattern. This brush was rotated in perspective and Fill Screen was employed to cover the screen.



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tive and Fill Screen was employed to cover the screen.

The lady's faces were loaded as brushes, rotated - over perspective centre - to match the background angles then stamped down with Translucency set to 45 percent. With Translucency, the higher the number the dimmer the brush will appear when stamped down. Using this knowledge the brush for the lower rectangles was introduced, tilted as the others were, then stamped down first at Translucency 45 percent for the more distant rectangle then Translucency 30 percent for the nearer example. Like I said, *Deluxe Paint* makes it easy.

A600 Perspective Tips

Remember that the Animation feature also moves brushes using Perspective. So if you pick up a custom brush it can be rotated in perspective apart from the numerics keys. Use the Per-

spective/Do item from the Effects menu to enter Perspective mode, place your brush over perspective centre, click it down then click Undo (keyboard u). Call up the Move requester (<Shift>m), set the Count: to one frame, move up to the angle boxes at the top of the requester and enter your preferred angles of rotation. Click "DRAW" and when the screen returns the brush is rotated. The only drawback is the brush that's been stamped down on the screen in the process. It can't be removed with the undo command.

To preserve your artwork select Background/Fix from the Effects menu immediately before opening the Move requester. After the brush has been stamped down by the Move command select CLR (CLEaRscreen) from the Toolbox and the only thing to be erased will be the brush. By clicking in the "Brush" box to the right of the "Angle" boxes in the Move requester it's possible to select "Screen" or "Brush" refer-

ence planes when rotating.

Help Me!

Hopefully our next foray into *DPaint* will cover animating in perspective for real 3D effects. Until then however, perhaps someone out there in Readerland can help me with a problem. I use *Platinum-Scribble* to write these articles but this program isn't altogether happy to load under Workbench 2. In fact it almost always gets to the stage of opening its project window when it gives up, removes itself from memory and returns to the Workbench screen.

I had almost resorted to using the original *Scribble!* sans thesaurus when I happened upon a fool-proof way of starting the *Platinum* brand. If good old *Deluxe Paint* is loaded first and left to run while *Platinum-Scribble* is started it'll run every time. Why is it so? Let me know, until then Ciao ... □

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AMOS Column

by Wayne Johnson

Continuing from last issue, we'll get into writing a fast and furious snake routine using AMAL. I'll show you how to create a snake of six BOBs flying after each other all around the screen. Sound hard? The actual AMAL that will control it all will be only a few lines long. Type the following program (the numbers and bracket before the line will act as a guide only - do not type them in):

- (1) Screen open 0,320,256,4,Lowres
- (2) Flash Off : Curs Off : Cls 0
- (3) Ink 2 : Circle 0,10,10,10 : Paint 3,5,5
- (4) Get Bob 1,0,0 To 11,11
- (5) Cls 0
- (6) A\$=A\$+"A: Move 100,0,50; Move 0,50,25; "
- (7) A\$=A\$+"Move -80,0,40; Move 0,-30,15; "
- (8) A\$=A\$+"Move 30,0,15; Move 0,100,50; "
- (9) A\$=A\$+"Move -50,0,25; Move 0,-120,60; Jump A;"
- (10) For A=1 To 6 : Bob A,20,20,1
- (11) Channel A To Bob A
- (12) Amal A,A\$
- (13) Amal On A
- (14) Wait 10
- (15) Next A
- (16) Do
- (17) Rem GIVE ME SOMETHING TO DO!
- (18) Loop

I think you could probably work it out by now, but for those who are still having trouble:

(1) and (2) sets up the screen. (3) creates a filled circle with a small border to use as the Bob image. (4) Grabs the image and stores it in the Sprite Bank (Go to direct mode and type LISTBANK to see for yourself). (5) Clears the screen to get rid of the im-

age. (6) to (9) is our actual AMAL program. Notice the A\$=A\$+... This simply adds strings on to A\$ to create one large string all called A\$.

(10) Sets up a loop to count from 1 to 6. (11) Uses those numbers to set up 6 channels to 6 BOBs, Channel 1 to BOB 1, Channel 2 to BOB 2, etc ... (12) Tells the channel where to get its information or AMAL data from. (13) to (14) Turns on one channel every time the loop repeats and waits briefly before continuing. This is very important as each BOB leads off, the others wait their turn and eventually follow in single file to make a snakey pattern.

Finally (16) to (18), AMOS just wastes time seeing that it really has nothing else to do. AMOS does have to be active in some way for AMAL to keep going. Otherwise the AMOS system will stop and so will all AMAL channels. However, if you go to direct mode, the AMAL channels will continue to operate to allow you to view them.

As for the AMAL program itself, we started with the A: label to tell the

AMAL system where the program will start. Following that is a series of different Move statements. Remember that the Move instruction goes like this:

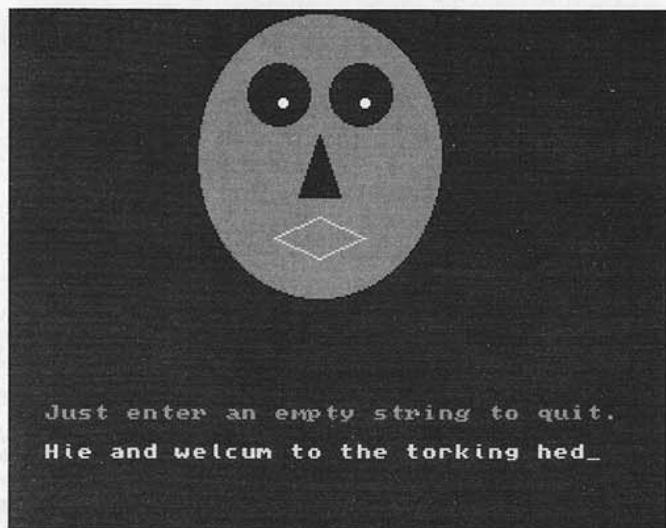
Move NO# of horizontal pixels, NO# of vertical pixels, speed

Therefore my first Move instruction was: Move 100,0,50. This means the snake has to move 100 pixels to the right, none down, at a rate of 50 which means to move it twice as fast (100/50 = speed 2). The fourth Move instruction was: Move 0,-30,15. This means that the snake has to move no pixels left or right, but 30 pixels up at rate of 15. And 30/15 (forget the minus) = speed 2. You can vary all these values yourself but you may get weird results so plan your flight paths!

At the end of all the Move instructions we have the Jump A instruction. Simply, jump back to label A at the start and do all those groovy moves all over again!

When you run the program, what would seem very hard to accomplish within AMOS is only a few lines long if you bother to master AMAL. There are a lot of good examples using AMAL within the PD. A good one at the moment is disk AA-151 by Michael Treggona. These are just a few simple but effective ideas and all using AMAL. PD disks are available from the club.

Now all this is good and fine for small programs, but what happens when



you want to write the latest 16 level, 70 layer parallax scrolling megablaster and you have to spend hours writing string after string? It's going to get a little daunting, isn't it? That's what the AMAL Editor is all about. Those who are subscribers to the AMOS Newsletter will know how much I push this program.

It's available on the AMOS Programs disk. This program is just like a text editor. It allows you to write all your code, in each channel (each having a separate page of its own), and run/test programs. The final result is saved out as an AMAL Bank. AMAL does not have to be stored just as strings. It can also be stored in a bank.

If you store your AMAL code into a bank, you call them with: AMAL 5,1 (Channel 5 to AMAL bank section 1) rather than AMAL 5,A\$ (Channel 5 to String A\$). So how would we write the above program using the AMAL Editor?

1) Boot AMOS and load in the AMAL_Editor.AMOS program.

2) Click on the EE icon. This page (or fake channel) is where we set up our screens, BOBs, or whatever. It is called the Environment Editor. Without it, you would design all your wonderful screen and object movements but would be unable to view the results without porting the AMAL code constantly back to AMOS.

3) Before we start typing, we need an object. This is necessary because we have no drawing commands like AMOS. The AMAL Editor has only a very few commands purely to set up screens and objects not to design them, so: Select LOAD AMAL BANK from the menu. This will, in fact, load any type bank, so select a sprite bank that you may have floating around somewhere. Any Sprite/BOB bank will do.

4) Enter a variation of our code into the Environment Editor
Screen Open 0,320,256,4,Lowres

Flash Off : Curs Off : Cls 0

Channel To Bob 0,0

Channel To Bob 0,1

Channel To Bob 0,2

Channel To Bob 0,3

Channel To Bob 0,4

Channel To Bob 0,5

Notice the different way the channel commands are used. This is the way they have to be set up in the Environment Editor.

5) Now Click on the 00 icon to start editing channel 0. Type the following code like the string before or add your own:

A:

Move 100,0,50;WTXT

Move 0,50,25;

Move -80,0,40;

Move 0,-30,15;

Move 30,0,15;

Move 0,100,50;

Move -50,0,25;

Move 0,-120,60;

Jump A;

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6) It's set out better than a string, isn't it? Select SAVE AMAL BANK and store the Bank somewhere on a disk.

Press F1 to run. You will notice that all the BOBs are moving together instead of in a snake pattern. This is because we did not set up a delay for each BOB like we did in the AMOS code. If we loaded this bank into the AMOS program, it would revert to a snake type pattern since it was the initialising routine that caused each BOB to delay. If you wanted to make a snake design purely in the AMAL Editor, then you would need to

1) Change the channel commands in the Environment Editor so that each BOB has its own channel.

2) Use the COPY and PASTE BLOCK commands to make 5 copies of page 0 (channel 0) into channels 1,2,3,4 & 5. Select Channel 1 and type the first delay header:

For R3=1 To 10;

Next R3;

3) Copy this header to the beginning of the next four channels 2,3,4 & 5 (channel 0 doesn't need a delay heading).

4) Go to channel 2 and change the delay from 1 To 10; to 1 To 20;

5) Change channel 3's to be 30, 4's to be 40 and 5's to be 50.

6) Save and run the AMAL program. Now we must load the bank into our AMOS program, but first we have to re-write our snake program to take in a bank, not a string:

(1) Screen open 0,320,256,4,Lowres

(2) Flash Off : Curs Off : Cls 0

(3) Ink 2 : Circle 0,10,10,10 : Paint 3,5,5

(4) Get Bob 1,0,0 To 11,1

- (5) For A=0 To 5
- (6) Bob A,20,20,1
- (7) Channel A To Bob A
- (8) Amal A,A
- (9) Amal On
- (10) Do
- (11) Loop

Enter Direct Mode and hold the left Amiga key and press F6. Press return and select the AMAL bank file. Go back to the Editor and run the program. Our code is somewhat shorter and the AMAL code is invisible to our eyes. That's the benefit of AMAL and the AMAL Editor. It's a very powerful system and can cut programming time down by 80%. 90% of your code can possibly be programmed in AMAL first without having to use precious processor time with AMOS code.

For the Pros!

Just a quick quiz at some new commands in AMOS Professional. These are the new mouth commands that read the frequency of speech and interpret it as a width and a height. Using these two values, you can animate objects to move according to the speech. The SAY command has been enhanced to accommodate this feature and this is the new addition of the SAY ultitask mode. When you use the command like this:

SAY "Wots a nice girl like u dooing in a plase like this?",1

The 1 after the string indicates that you wish your AMOS program to keep running regardless of the fact that speech is active. In AMOS 1.34, speech pauses programs while they are executing. Now with multitask mode, you will be able to determine values from speech, and animate objects. Think of it as a Vumeter() command for speech. Take a look at the following program:

- (1) Double Buffer
- (2) Autoback 0
- (3) Say "testing for x and y movement",1
- (4) Do
- (5) Screen Swap
- (6) Cls 0
- (7) Mouth Read
- (8) Bar 0,0 To Mouth Width*10+1,Mouth Height*10+1

- (9) Wait Vbl
- (10) Loop

News

We finally have the V1.3I update disk for the 3D Object Modeller. This version is now compatible with Kickstart 2.X, so you can throw your kickstart switch away. The update is available from the club. It's uncertain at this stage whether AMOS Pro will support the ECS, or AGA chipset in the 4000/1200 Amigas. As soon as there is an update, you'll find it here.

After many requests, the entire AMOS PD list has been compiled onto a bootable disk with its own menuing screen. This is available on Predators BBS (02) 604 6644, the BLADE BBS (02) 957 3050 or directly from the club.

Bug Reports and Problems

As with all V1.00 software, there's a few bugs:

1) AMOS Pro's editor has a habit of destroying its graphics with multiple windows being opened, moved around, sent to the back, and being brought to the front. Occasionally this will send the cursor to the very top left hand of the screen and no further editing will be possible. This does NOT crash the system! You are still free to select from the menus, to save or quit, etc.

2) There seems to be a problem with the PRINT USING command. It manages to erase with the current selected ink, all the graphics right of the "?".

3) The CHECK 3.1 menu selection does not appear to know if the programs are really AMOS 1.34 compatible. Despite the new commands being present in programs, this option always tells you "This program is compatible with 1.3".

All these problems should be corrected by the time you read this (I hope!). The interface language hasn't been covered this time due to space. Sorry. Keep at the AMAL coding and see what is possible to squeeze out of the tiny, hidden, interrupt driven language. □

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Down the Opal Mine

by Robert Roy

Welcome to the first Down the Opal Mine column. We plan to make this a regular part of ACAR in which we will explore the various parts of the OpalVision system, answer common questions, explore new products and provide you with tools and techniques to make your time both productive and fun.

We also plan competitions and contests that will challenge your skills and benefit all Opal owners, and we would love to hear any ideas or requests for topics to be covered. Anyway, enough of the preamble, and let's get down to it.

OpalVision Software Upgrades

When this column was written Version 1.4 of *OpalPaint* was available on OpalVision support BBSs. While this is an interim beta version and will not be officially distributed as an upgrade, by the time you read this Version 1.5 should be out or VERY close.

The new versions incorporate such features as Alpha Work Mode, full ARexx support with over 150 commands, overscan painting, the Magic Wand, Real-time preview for many modes, Fix-Background and of course various bug fixes. Upgraded versions of all OpalVision programs (plus a few new ones) will be posted out to all registered owners, and will also be available from your dealer and from the various OpalVision support BBSs listed below. If you have not received your update by the end of February please do yourself a favour and contact the dealer you purchased your unit from.

The *OpalAnimMATE* programs are

also available on a BBS near you, providing 8, 12, 15, 18 or 24-bit animation building and playing. We have an example animation here running an 18-bit, 98-frame loop generated by *Vista PRO* which must be seen to be believed. *OpalAnimMATE* is also perfect for those ubiquitous morphs and spinning logos. Stop Frame Animation is still the only way to get full frame-rate animation at broadcast quality, but this is a great substitute for "the rest of us".

In other software news, *Art Department Professional* now fully supports OpalVision with a direct display Saver module and the ability to use *OpalPaint* as an Operator! Other packages that have completed or nearly completed direct OpalVision support are *Scala*, *Real3D*, *ImageMaster*, *Imagine* and *Aladdin 4D*.

Other News and Information

The various OpalVision expansion modules are progressing very nicely, including an integrated Frame Grabber, Chroma/Luma-Key and Genlock (all one module), a multi-input production switcher for full broadcast-resolution vision mixing and colour processing, the Time Base Corrector / Scan Rate Convertor module and the Video Roaster chip for incredible Digital Video Effects on live video.

Unfortunately one of the critical chipsets we had chosen was not up to scratch when we got it into prototype form, but we assumed you would rather wait a few more months and have a product with the same high quality standards as the OpalVision Motherboard and *OpalPaint*. You will also be

This month's Gem of an Idea

Start on a black screen set up with strong Paper-Type and Chalk Artist's Tool. Load an image as a Secondary spare page, and use Rub Through with Additive Mode on 50% to build up the picture on the blank page.

pleased to note that we took the opportunity to add many more features including 5-channel stereo audio mixing, twin YUV support, the chroma and luma keyer, the Time Base Corrector and much more. We hope to release all modules around May, with the Roaster a couple of months later. Contact Opal Tech or your dealer for further information.

Upgrades and utilities are also available from a BBS in most states, with a general OpalVision discussion echo active on AmigaNet at an Amiga-friendly BBS near you. Once again contact your favourite sysop or Opal Tech for details and phone numbers.

Next Month

Next month we will look at digital compositing and give more "Gem of an Idea" hints. We will also introduce a competition for the best "Gem of an Idea" painting effect from you, the users of the Opal, so start experimenting, write them down and send them to me at Opal Tech by mail or on the OpalVision echo.

Well that's about all for now. For information and support please call the friendly staff at Opal Technology on (02) 899 4322 or fax us on (02) 899 5749. We would also love to see your work, so pop it on a disk and send it in to PO Box 117, Castle Hill NSW 2154. You never know, it could make it onto the OpalVision distribution disks and make you world famous! Till then cheers, and we'll see you down the mine sometime. □

You Can CanDo Designing A Font Requester

by Greg Abernethy

I've often wanted to use different fonts in various projects I've done. I find it annoying having to search through a list of fonts, select it and then type it to see if it's suitable. I decided to design a font requester that loads the font list from the FONTS: directory and allows me to scroll through the list and click on the various fonts to see which font is the most suitable for my purposes.

This month's tutorial will be the font requester. I have designed mine to display fonts up to 24 point size, but by editing the window size, you could design a font requester to show fonts up to 100 point size. Also, you could have an option to change the directory location for the font list. This would enable the user to examine fonts from any location instead of being restricted to the FONTS: directory.

The application will consist of a window on the Workbench, that has a document for displaying the font list and a document for displaying the point sizes available for the selected font. An area has been left to display the font and there is a button for closing the font window. Another idea would be to iconify the window, to enable it to be popped up at any time on the Workbench to view the font list. There is also a field for displaying the name and point size of the current font.

Card Specifications

CARD NAME "FontList"
AFTERSTARTUP SCRIPT
SetCurrentDirectory "Fonts;"
WorkWithDocument "List"
Clear DOCUMENT
InsertDirectoryList DIRECTORIESONLY
MoveCursorTo ENDOF DOCUMENT
Delete CHARACTER,-1
MoveCursorTo STARTOF DOCUMENT
Do "SetFont"

Explanation: When the deck loads, I set the current directory

to FONTS:, clear the "List" Document and display the directories contained in FONTS: I delete the last character in the document to avoid a blank line in the document. I then do the "SetFont" routine, which is explained later in the tutorial.

The specifications for the window are;
WINDOW NAME "Font List..."
WINDOW SPECIFICATIONS
X POSITION = 190 : Y POSITION = 20
WIDTH = 260 : HEIGHT = 160
NUMBER OF COLOURS = 4
WINDOW DRAG BAR : WINDOW FRONT/BACK
GADGET
WINDOW OPTIONS
THE WINDOW HAS VISIBLE BORDERS
TRY TO OPEN WINDOW ON WORKBENCH

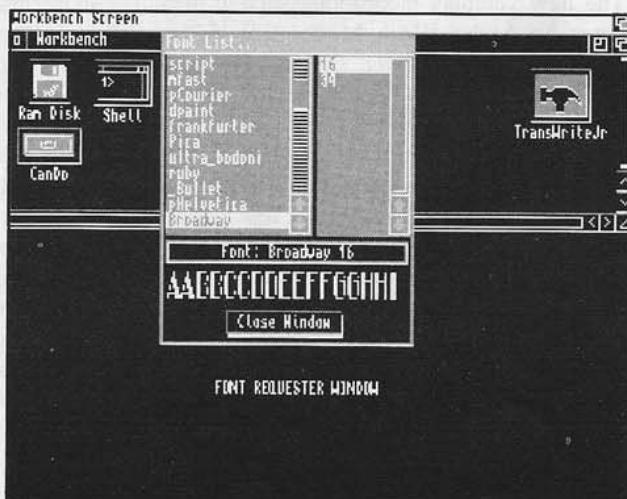
Font List Document Specifications

DOCUMENT
OBJECT NAME "FontDocument"
DOCUMENT NAME "List"
DOCUMENT TYPE List Document
DOCUMENT ORIGIN X = 6 : Y = 12
DOCUMENT SIZE Width = 148 : Height = 91
BORDER Outline

RELEASE Script
WorkWithDocument "List"
If TrimString(TheLine) <> ""
 Do "SetFont"
EndIf

Font Size Document Specifications

DOCUMENT OBJECT NAME "SizeDocument"
DOCUMENT NAME "Size"
DOCUMENT TYPE List Document
DOCUMENT ORIGIN X = 161 : Y = 12



DOCUMENT SIZE
BORDER

Width = 94 : Height = 91
Outline

RELEASE Script
WorkWithDocument "Size"
If TrimString(TheLine) <> ""
 Do "SetSize"
EndIf

MESSAGE FIELD SPECIFICATIONS

Field Name = "Style"
Horizontal = 10
Vertical = 108
Width = 240
Border = DOUBLEBEVEL
FieldType = "Text"
Centre Justification

NO Script

CLOSE WINDOW BUTTON SPECIFICATIONS

Button Name = "Go"
Horizontal = 69
Border = SHADOW
Button Type = "Text"
Text = " Close Window "

RELEASE Script

Quit ; When the user closes the window the program ends.
You could
; substitute the ICONIFY window as described in an earlier
tutorial.

ROUTINES

"SetFont" ROUTINE
Let font = TrimString(TheLine)
SetCurrentDirectory "Fonts:"||font
WorkWithDocument "Size"
Clear DOCUMENT
InsertDirectoryList FILESONLY
MoveCursorTo ENDOF DOCUMENT
Delete CHARACTER,-1
SortDocument ASCENDING
MoveCursorTo STARTOF DOCUMENT
Do "SetSize"

Explanation: When the user selects the font to view, I set the current directory to the location of the selected font. I then clear the "Size" document and insert the point sizes available for the selected font. I sort the point sizes in ascending order and then move the cursor to the start of the document. I then perform the "SetSize" routine (explained below).

"SetSize" ROUTINE
Let size = TrimString(TheLine)
SetPrintFont font,size
GetTextDimensions "A",w,h

```
Let n = 240%w
SetPen 0
AreaRectangle 7,120,247,20
SetPen 1
PrintText LeftJustify("AaBbCcDdEeFfGgHhIiJjKkLl
MmNnOoPpQqRrSsTtUuVvWwXxYyZz",n),8,120
SetText "Style", "Font:"||font||size
```

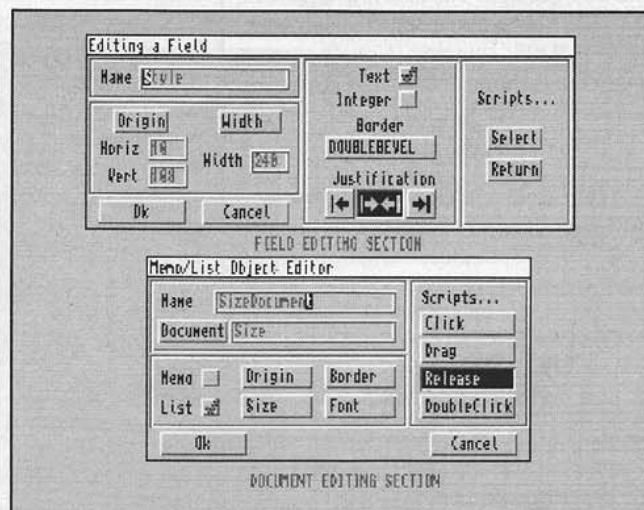
Explanation: When the user selects the font size to view, I set the font to the selected font type and point size. I get the width and height of the current font. I divide the width of the window by the width of the current font. I then draw an AreaRectangle to remove the display of the previous font. I print as many characters from the alphabet as can be displayed across the window.

Lastly, I set the "Style" field to show information on the current font and its point size.

In Review

This is all that is required to develop what I feel is a very useful utility. It took me a remarkably short time to originally develop this application. I still find CanDo excellent for fast application development. I have found that when developing applications that there seems to be less problems debugging applications because of the modular way that CanDo is designed.

Once a button, field or document has it's script written and is working correctly, it only requires minor modifications to be adapted for use in other applications. The Font Requester utility could be used in a Word Processor, Desktop Publisher, or Paint program without the need to change any of the specifications of the window. Another useful addition would be the ability to have the Font Requester return the current font to another application. In this way you could use it as a subdeck for a word processor or paint program. I'd be interested to see any CanDo applications that take advantage of the Font Requester. Enjoy! □



The C64 Column

by Owen James

Big Blue Reader 4

Sogwap Software's *Big Blue Reader* has recently been updated to version 4.0. *Big Blue Reader* is a utility to convert between MS-DOS and C64/128 disks, and supports the 1571, 1581 but unfortunately not the 1541. New to V4 is the ability to interpret control codes from files created with *Speed Script*, *Omni Writer*, *Word Writer* and *The Write Stuff* and translate them to an MS-DOS format. For more info write to 115 Bellmont Rd, Decatur, IN 46733, US.

GEOS Utilities

Creative Micro Designs have been busily releasing new software and updating older titles. For serious GEOS users, *Collette Utilities* is a 'must have'. As the name might imply, it is a collection of the best GEOS utilities from well known GEOS programmer Jim Collette. Included is *Font Editor 2.5*, *Font Changer*, *geoWizard*, *MiniDesk*, *Postscript Processor* and many more.

Watch out for an upcoming review in The C64 Column. The disk is available in Australia from Novo Computer Hardware for \$55.00 plus shipping (Novo's contact details are mentioned later in this article).

Gateway 2.5

Again from CMD, V2.5 of *gateWay* has been released. *GateWay*, a popular GEOS deskTop replacement, now boasts many new features and adds support for

the new FD-Series 3.5" drives. V 2.5 of *gateWay* for the C64 and C128 are available from Novo for \$49.00 plus shipping. Again, watch for an upcoming review.

Perfect Print

Still with CMD, an Enhanced version of their *Perfect Print* for GEOS is now available. New features include Border Font support (one included), a new IBM 24 Pin printer driver and better IBM printer compatibility in general, HQ 9 pin drivers have been vastly improved with regard to quality and speed of printing, bug fixes and general enhancements with the LQ Print system. For local availability contact Novo Computer Hardware.

JiffyMON 64

This time for JiffyDOS owners, *JiffyMON 64* is a Machine Language Monitor designed especially for use with CMD's JiffyDOS-64 system. JiffyDOS is a disk drive speed enhancement system consisting of a replacement chip for the Kernal ROM inside the C64 and your disk drive's DOS ROM. There are many benefits from JiffyDOS, but perhaps the most notable is the 1500% speed increase on disk operations and guaranteed compatibility.

Besides the regular functions you'd expect, *JiffyMON* 64 includes an in-built sector editor, disk drive monitor, and several powerful debugging commands, all without stealing any of the memory usu-

ally reserved for BASIC programs. \$39.00 from Novo.

GEOS BBS Echo

Of interest to GEOS users is a new 'echo' (electronic discussion area) titled CBM-GEOS. At present, it is only distributed privately between several Bulletin Board Systems in the US, but if the popularity of it continues to increase we may even see it on Australian systems.

New Floppy Drives

The long awaited FD-Series disk drives from CMD are now available in Australia. The FD-2000 offers 1.6MB of storage space on a High Density 3.5" disk, while its big brother, the FD-4000, boasts an amazing 3.2MB of storage when used with Enhanced Density disks. For the record, MS-DOS users have up to 2.88 MB floppies, most Macs are 1.44 MB, and current Amigas are still stuck on 880Kb. Only the high end of the PC market can offer the 3.2 megabytes of floppy storage now available for our C64s.

The FD-Series drives are billed as the fastest floppy drive ever built for the C64 and 128, with speeds of up to 20% faster than a 1581. On JiffyDOS equipped systems an increase of up to 1200% can be achieved. Both units can emulate 1541, 1571 and 1581 disk drives, or they can use their own 'Native mode' partitions which offer the advantage of MS-DOS and AmigaDOS styled sub-directories.

Prices are \$500 for the FD-2000 and \$650 for the FD-4000.

A Real Time Clock Module is available for both drives for an extra \$45.00 and is highly recommended. Shipping costs are \$30.00. Contact Novo Computer Hardware, PO Box 237, Mayfield NSW 2304, Tel/Fax (049) 602 082.

geoMakeBoot

Also from CMD is *geoMakeBoot*. Quite simply, *geoMakeBoot* will create GEOS boot disks on virtually any type of

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Hot PD

What's new in the world of public domain and shareware? Daniel Rutter takes us on a guided tour of all the latest additions to Amiga's growing library of almost free software.

Mostra

Displaying IFF pictures with *Mostra* is made simple. Virtually all formats and sizes are catered for. The author, Sebastiano Vigna, says *Mostra 2* is in the pipeline, with many new features; for the time being we have to be content with 1.08, which includes various bugfixes and may be found on Fish 753.

Maint

A simple CLI utility that fills a need, *Maint*'s sole purpose in life is to find files in a directory over a given number of days in age and delete them. It'll also kill protected files if you ask it. You'll know if you need it; if, for example, you keep old mail bundles for an off line reader it's handy.

DMSWin2.34

A compression utility designed to squash whole disks into files, normally for modem transmission although I suppose you could also use it for archiving, since it'll happily compress non-DOS disks. The only problem with DMS is that it can only be used from CLI, which makes sensitive new age Workbench users tremble.

Enter *DMSWin*, current version 2.34, which allows all you Workbench users to access DMS without the key tapping. Works well, and requires v1.11 or later of DMS.

PowerSnap2.1

Need to cut text from somewhere out of the ordinary? *PowerSnap* is now easily the best Snap utility for the Amiga - it lets

you grab text from almost anywhere and paste it back almost anywhere else. This current version, 2.1, adds one major feature - a history function.

Hit alt-H (or any other combination you set) and a window appears with the first few characters of every snapped block since the start of this session. Thus can you easily mix and match from previous text without hopping around re-snapping stuff. This is a good thing.

PowerSnap also coexists better with programs innocently going about their window maintenance and not expecting some marauding process perving on their text. You can also now use the middle mouse button as a qualifier - this feature was there before but, ah, inadequately implemented. Now it works, so you can snap without using the keyboard, provided you've got a three button mouse.

Term2.5

Term is the only big free modem communications program for the Amiga. You don't have to pay a penny to use it, although the author would very much

LIKE you to send him something - anything - that you feel the program's worth. Early versions were notorious for their infestations of tiny livestock, but every new version had more bugs squashed and the current one, 2.5, is an excellent program - and great value for money!

Oddly, the manual says that starting with this release, Kickstart 3.00 and Workbench 3.00 are required to run the program - which had me somewhat startled, since WB3 machines are hardly thick on the ground. Fortunately, the author must have been thinking of something else when he wrote that, since *Term2.5* fires up fine on my WB2 machine. Note that *Term* will not, however, work on any versions of WB before 2. *Term* is much too big to put on the companion disk (see end of article for how to get this), so I've compiled it onto a disk of its own, on which all of the XPR libraries are in a self extracting archive - just copy it onto a disk of its own and run it like a program, then copy back the libraries you need.

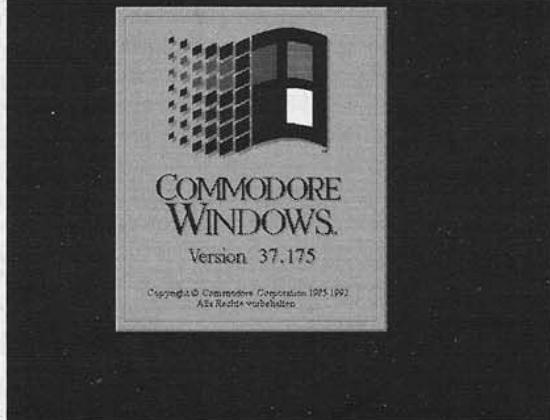
PPShow3.0

PPShow and *PPAnim* were the utilities to allow pictures and animations to be viewed after crunching with the excellent compression utility *Power Packer*. *PPShow3.0* amalgamates the two, so it'll happily deal with both pictures and animations, whether or not they're crunched. It also supports WB3 completely, and has many other hip, fab and groovy features. Every home should have one.

Fish Disks

The most recent Fish disks, now up to 770, have contained the usual crop of good stuff. Some of the best:

On disk 753 there's an update to *SuperDuper* (SD), which is a very fast, powerful and flexible disk copying and formatting program which I use all the time. It will make a verified copy from RAM buffer in 67 seconds (unverified speeds are much faster but you're playing Russian rou-



lette if you try it); it takes less than 170 seconds to do FOUR simultaneous copies from RAM - provided you've got four floppy drives.

A regular disk to disk copy will take less than 100 seconds with verify, and between-copy time is cut down because SD's got an auto start option which starts another copy as soon as all the destinations have been changed - no mouse clicking! It fully supports WB2, has an ARexx port, runs from WB or CLI, and is generally the best thing since sliced bread - although it WON'T copy most copy protected disks.

On disk 760 you'll find the excellent *ARestaure*, which is a PD undelete utility, something hard drive users have wanted for some time. *FixDisk* will do it, but not on partitions over 48Mb, and usually when undeleting you don't need all the bits and bobs associated with bigger file recovery programs. *ARestaure*'s quite fast, dead easy to use and works perfectly.

760 also contains *BootJob*, *The BootBlock Utility*. This is another utility which stores and installs bootblocks, so you can save the bootblocks of your non-DOS disks and not get them stomped by viruses, but it also lets you save any bootblock as an executable file. This lets you start any boot-util, virus checker, game, or loader from the



KingFisher

CLI - at least that's the theory. In practice it can take some serious jiggering around and if it didn't run on your machine to start with you're certainly not going to make it happier, but it's worth a look. It needs OS2.0 to work.

760's a good one. There's also *FIM*, *The Fast-Intro-Maker*. It's another one of those little utils that lets you take a picture and some text and make a little disk intro, which can be saved either as a stand alone file, or as a custom bootblock/support file combo, so the intro will pop up when the disk is booted. It's cute and documented, and it works; *FIM* also needs WB2, but the intros will run fine on WB1.x.

Still on 760 (don't worry, this is the last one), there's *Fleuch*, a crummily named but brilliant game related to *Thrust* on the 64. That's right, it's another one of those games for all the physics professors out there, where you

pilot an agile little ship through mines and learn all about action, reaction and violent impacts.

Oh yeah, and there's bullets involved, too. The twist is that when you get to the bottom of the diabolical stages, you have to hook onto a little ball, with a rope that never changes length, even if you swing it right around the ship. It becomes a fascinating exercise in applied thrust dynamics, and it really annoyed the

heck out of me. Recommended.

On Fish 768, 769 and 770 is a three part distribution of the late Rick Stiles' Amiga version of his text editor, *UEdit*, placed in the public domain after his death. *UEdit* is very plainly an IBM port, but if you use it on IBM you'll find everything as you expect it, and if you're not looking for an editor with big Amiga features (or, indeed, any!), you'll like *UEdit*. It's completely customisable, with a learn mode, a command language, menus, hypertext, online help, a teach mode, split windows, copy and paste, undo, spell-checking, many word-processing features and more - and the price is now definitely right!

On Fish 762's *PlotMap*, a tool like *DrawMap* that draws a map of the world's surface. PM uses *Drawmap* 4's map files but is much faster, runs on 512 KB machines with just one floppy,

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has a zoom box from a box map, abortable drawing and more. If you need maps, of any scale, in any projection, of anywhere, down to quite small scale, this is the utility to use. Requires OS 2.

KingFisher beats Aquarium

While we're on matters Fishy, one thing everyone dealing with the huge Fish catalogue needs is a good reference database of some sort, so you can actually find things without poring over a paper catalogue the size of a phone book. The original Fish database was *Aquarium*, and is still in service on many machines.

Aquarium allows searching for all sorts of categories, but unfortunately has to have its main data file in one lump. This means that unless you've got a hard drive, you can only have about a 550 disk database - even with deep and painful mucking about with

real time compression you'll not get the full library on floppy. HD users could get along, but the disk adding program was flakey and the whole package needed updating.

The later Fish

Cat program was a bit better, but didn't solve the problems. My own solution was to simply make a humungous text file - 1.3Mb! - and use it with my text editor, but once again you ned hard drive and lots of RAM.

KingFisher to the rescue! It's a fast, powerful Fish database, which allows you to split its files onto several floppies, with five to six hundred Fish disks per floppy. Of course, search speed from floppy is pathetic (though actual searching, disregarding drive speed, is three times faster than *Aquarium*), but you can just start it and go for a cuppa, with references sent to the printer or a file. It offers eight "bookmarks"; individual positions in the library, complete with

up to six search criteria set. It also saves to disk your search criteria every time you quit, so everything'll be set up the same when you start the program again.

Want more features? Okay, how about adding new Fish directly from Contents files or Usenet postings, even from multiple concatenated postings or email contents files, easy database maintenance so one error won't stuff the whole base and you can easily tweak it and then redo the index, easy limiting of searches to a given chunk of the base, version hunt to easily and fairly reliably find the most recent version, proportional and scalable font support and iconification to save Chip RAM. In a nutshell, Get It. The version I got came with data files up to disk 770.

KF didn't work with MagicMenu on my system, causing gurus whenever I tried to use the menus - when I turned MM off it was fine. It will run on 1.x or 2.0, and it may not be distributed for profit so you'll find it only on BBSes and through user groups.

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BootLogo

You've seen those woosy Windows machines and their twee startup screen. Well, now you can look just as silly with *BootLogo*, a simple utility to pop up a screen guaranteed to produce double-takes in your friendly neighbourhood IBMoid. It automatically cuts off as soon as anything else tries to get a screen happening. Silly, useless, frivolous - I just HAD to mention it!

Virus_Checker 6.20

John Veldthuis' excellent *Virus_Checker*'s hit v6.20. There's the usual few extra viruses and a bugfix, plus it can now unprotect read-protected files during the file scan. V_C's small, reliable, easy to use, needs no fancy installation and works fine on any Amiga.

Billboard

Billboard (BB) is a simple little program to send messages to a computer

user in a more attractive way than simply using the ECHO command. When BB is run it will open a gadgetless window in the center of your Workbench screen. This window can have one of three different graphic images in it and up to three lines of user-definable text. The three graphics are the Commodore logo, a bored man and an announcer. It's a useful little script utility, and lets you pretend you're a Macintosh.

ViewTek

Another multi viewer program, *ViewTek* is a WB2 utility which will display most ILBM's, including 24-bit; most GIF format images; most JFIF JPEG images; most ANIM Op-5 format animations, with multi-palette support; SHAM, CTBL, and PCHG images. It supports AGA completely, so you can show 256 colour GIFs without conversion, 800x600 HAM animations and other groovy things provided you've got an AGA machine. VT also

includes a version written for GVP's *Impact Vision 24*, to support true 24-bit display, and even includes a stripped-down version that doesn't show GIF's or JPEG's for those who don't need it. It's FreeWare, so I think on the whole it's quite a good deal!

Get The Disk!

The companion disk for this column, HotPD 6, contains everything listed, except where otherwise noted. On previous disks I've archived the contents, but Prime Artifax was deluged with people who couldn't work LhA so from now on no compression will be used.

The current batch fits on one disk, because of the extensive Fish references above; later companion disks will probably be twin disk sets. I've added icons to all the drawers and set up all the text files to display with FullView. Note that not all the programs have icons, since there's no point with CLI only utilities. To order call (02) 879 7455. □

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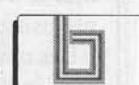
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- Cartoon 2 - Amy-Vs-Walker
- Cartoon 3 - Juglette, Juglette-2 and Juggler-2 (Send up of the old Juggler)
- Cartoon 4 - Stealthy Manuever, Swiss Army F-16
- Cartoon 5 - Bugs Bunny

2MB Required

- Big Cartoons 1 - Anti-Lemmings Demo - Hilarious send up of game.
- Big Cartoons 2 - Coyote 2
- Big Cartoons 3 - POGO
- Big Cartoons 4 - The Dating Game (2 Disks - long running)
- Big Cartoons 5 - Unsporting (Amazing battle of hilarious proportions!)

Watch for new CARTOON disks every month.

Hot Games

#9

· PACMAN (Runs in HAM mode) - THE BEST VERSION YET! Plus OmegaRace, Columns, Nebula and POD. Easy to install on Hard Drive or ready to run as is. Documentation on disk.

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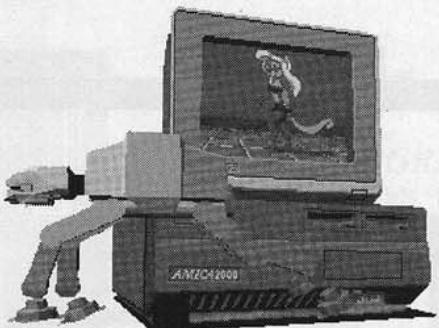
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CDTV

Phil Campbell

Senny and Foo

Want to help two friendly lizards explore five who universes? Me neither! But we'll be able to sometime in the next month thanks to Almathera systems in the UK. Whether this is the CDTV title that will blow everyone out of the water, we'll have to wait and see.

Prey

From throughout the galaxies they came ... men of prosperity and fortune. They were a new generation, ready to spearhead the Ralon empire's colonisation of the outer worlds. They searched

the galaxy, looking for unspoilt planets to occupy. And ... spoil. You're one of them, and you've settled with your family on asteroid KG-42. Don't relax yet, though - because something unforeseen is about to happen! This is *Prey*, a new CDTV game featuring fractal generated landscapes, glowing ray traced machines, and - apparently - plenty of challenging gameplay. Watch out for a full review in April's CDTV section.

CDTV Feedback

Send your CDTV queries, comments and complaints to Phil Campbell at PO

Public Domain on Tap With CDPD2

I've just spent the best part of a day wading through hundreds of Public Domain disks - all part of the CDPD2 collection, a CDTV disc that's simply packed to the gills with top quality software.

Produced by British Almathera systems, and distributed in Australia exclusively by Don Quixote Software, this single CD contains over 600 megabytes of freely distributable software, including Fish Disks 660 to 760, the entire Scope Disk collection (up to disk 220), the AB20 Archives, plus a bunch of useful utilities, including a PD library copier - if somebody wants a copy of Fish Disk 693, for example, simply specify it in the copy program, stick a floppy disk into your floppy drive, and sit back and relax!

The ideal way to run the CDPD2 disk is with an A-570 or A-670 drive attached to your Amiga. Alternatively, if you're strictly a CDTV user, you'll definitely need an external floppy drive and a keyboard to access the programs on the disk. The system boots to a standard workbench screen, and everything is well iconised - very few programs require the use of the CLI.

Most people by now are more than familiar with Fred Fish and his fabulous PD collection. Scope Disks, though, are more of an unknown quantity. Believe me, they're good! The material seems to have been better "filtered", with plenty of practical files like *Soundtracker* modules, clip art and *Pro-Page* and *Pagestream* fonts.

So far, I've grabbed a bunch of *Pagestream* fonts, including "Flash", "Freehand", "Oakville" and "Ballet Engraved." They're nice! In the Clip Art department I've found some beaut geometrical borders, a drawer full of Celtic-style pictures, and a range of *ProDraw* generated clips. Not only that, I've finally found a "dropcloth" program that suits me - "Tapestry" inserts a two colour picture in place of your Workbench background colour, so now I can admire the beautiful face of "Lyssette" - the demo file - as I work. *Pro-Dialler* is another nice find. It's a well configured phone database and dialler that runs well, though the interface looks a bit untidy in Workbench 2.0 format.

In short, I'm as happy as a pig in mud!

Box 23 Maclean NSW 2463. We'll hunt for the answers you need, and print them right here in CDTV-Feedback.

Software Business Advice

Dear Phil, I'm in the middle of setting up a software business and was wondering whether it would be worthwhile including CD-ROM titles as well as the A570 CD-ROM drive. Keep the reviews rolling in. If you need any CD titles to review, contact me and if my business gets up and running, I will supply them.

B.C. Pike, Mooloolaba, Qld

Ed: My advice, for what it's worth, is to give it a crack. Other CDTV stockists are finding business brisk at the moment, particularly in Southern Queensland. Though Commodore are keeping a fairly low profile with the A-570 CD-ROM drive, I reckon it's the best thing since sliced bread - especially now that the pre-production design flaws have been fixed. In other words, the best-case scenario is that almost every Amiga 500 and 600 owner will feel the need for CD compatibility - the A-570 is affordable. Hence, everyone will buy one, and you'll be rich.

Fact Box

CDPD2 offers a roomful of Public Domain software on a single compact disc. Programs are well organised on the disc, and easy to copy onto standard diskettes. Highly recommended!

Ratings:

Information Quantity	93%
Information Quality	87%
Information Access	84%
Overall	86%

Distributed by Don Quixote Software, phone (076) 331 561.

There's so much stuff stacked in here that I'll be at it for days just to check everything out. And even then, I'll just be skimming the surface.

CDPD2 is highly recommended, as is the original CDPD. If you're into Public Domain software in a big way, the amazing thing is it's actually cheaper to buy an A-570 CD unit and the two CDPD disks than it is to buy the 900-odd blank floppies that you'd need to contain all the software! Has to be a bargain!

For Beginners Andy's Attic

Amateur Radio Operators + Amiga Satellite Tracker + BBS Register

by Andrew Leniart

If you dabble in Amateur Radio, then the recent release of the following software should be very interesting to you indeed. Even though I am personally not into Amateur Radio, I was most impressed with the looks and performance of *Satellite Tracker*, a real time satellite tracker by a couple of local shareware authors here in Hoppers Crossing. Here's a few words the author Steve Offer had to say about why he constructed the program ...

"Earlier this year Electronics Australia published a short series by Tom Moffat which enabled the electronics enthusiast to construct a simple weather satellite imagery decoder. The decoder is called WeSat and it seems to work quite well. There was nothing new about this, in fact a Queensland distributor has had a more advanced IBM PC system on the market for years. However, the one thing that was unique about Tom's project was that he had supplied Amiga software.

"With WeSat constructed, debugged and serviceable I was all ready to go, now where are those weather satellites? Unfortunately the only satellite tracking programs available for the Amiga are basic and barely usable.

"All I seemed to have achieved was to identify the requirement for a real time satellite tracking program for the Amiga. Enter *Sat-Tracker*."

My Own Comments

In my own opinion, *Sat-Tracker* is a good example of what true shareware software is supposed to be all about. Containing absolutely no crippled features, *Sat-Tracker* is distributed on a try before you buy basis, relying totally on the end users honesty and good will to send in the registration fee if he finds it useful.

Sat-Tracker may be obtained from Prime Artifax PD library (008) 252 879 or direct from the authors by sending in a cheque or money order for \$5.00 payable to: Steve Offer c/o Andy's Attic! PO Box 1335 Hoppers Crossing Vic 3029.

Readers' Letters

Room for just one this issue. Trevor Parker of Ballina in NSW writes:

Dear Andrew, I have found your articles in ACAR most informative and helpful. Please keep them going. I am a reasonably proficient WB2 user whose main interests are programming (CanDO so far), WP (novels & poetry) and graphics to support my landscape oil painting.

Living in such an isolated (although idyllic) place, ie: from an Amiga users viewpoint, has brought me to the point where I really need to become a BBS user to open up communications with

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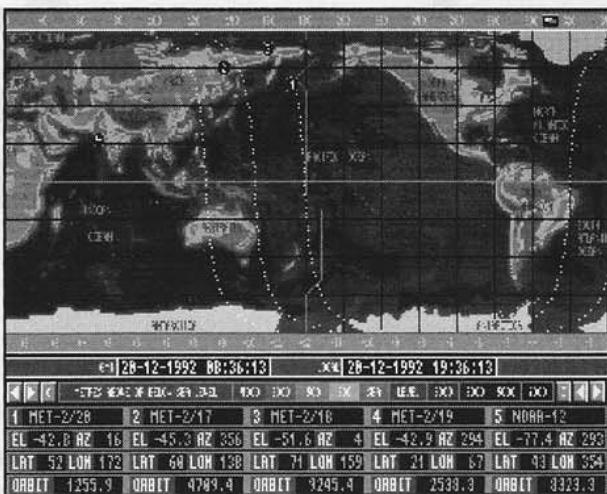
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other kindred souls if I am to hasten my progress and hopefully help others to do likewise. To this end, I am purchasing a modem shortly.

Because of your excellent articles, I don't need advice about the generalities of how BBSs operate or the ethics of using them etc. However, I do need a starting point in identifying the existence of BBSs in my general area and elsewhere. Is there a national register or listing and if so, how can I obtain access to it? Will it give me telephone numbers of SysOps so that I can check out my likely interest in contributing to and using their systems rather than resorting to trial and error?

Finally, is it feasible for you to write an article on the "general" steps involved in accessing and using a BBS efficiently, eg: how to minimize time on the line correctly, a diagram and explanation of what the new user is confronted with when a BBS first appears on a screen, how to proceed etc? I realize that there is no standard set up but are there many common features that could make such an article worthwhile for nervous first timers like me? You could perhaps liken my trepidation to that of some young Grecian maiden of ancient days, quietly pacing in an Arcadian grove, anxiously



Sat-Tracker

awaiting the appearance of her lover! Any information or advice you can offer will be much appreciated.

AA: That last one's a tall order Trev, but we'll see what we can do for you and other nervous like minded modem first timers here. Starting from the top.

Your decision to purchase a modem is an excellent one that will give you access to hundreds of other like minded Amiga users. One thing to keep in mind before shelling out the hard earned cash for one of these babies though. Do yourself a favour and make sure you purchase one that is capable of at least 9600 baud connects. While 2400 baud modems are available in abundance

these days, both new and second hand, it is well worth waiting till you've saved enough for the faster speed. The difference between the two is truly amazing in more ways than one.

There is in fact a type of national register available listing BBSs called the Australian BBS Registry which is co-ordinated nationally by a chap named Rodney Creer. You should have by now received the complimentary disk I sent you containing these listings, however for others requiring this type of info, try writing to

Rodney Creer c/o The Australian BBS Registry PO Box 731 Penrith NSW 2751 and ask for further information on how to obtain a list via snail mail. These BBS listings are continually being updated and while are by no means a complete list of BBSs available to call in Australia, give a fair selection of ones to call. The other way is to grab a copy of the latest *Amiga Annual* (now on sale and available) which contains an article by Daniel Rutter that contains the numbers of quite a few Amiga boards in Australia.

In regards to general hints and tips when accessing a BBS for the first time, you guessed quite rightly that there is

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no "standard" setup of when logging on to any BBS. However, for the most part, the log in procedure usually consists of the following questions.

1. What is your name?
2. What is your home phone number?
3. Do you want Screen clearing codes sent?
4. Do you want ANSI colour and graphics?
5. Do you want to use the ANSI full-screen editor?
6. How many lines does your display have?
7. Would you like to pause after each screen page?
8. What is the suburb and state you are calling from?
9. What is the password you would like to use?

Basically, all you need do is follow the prompts by the board and answer the questions asked of you. Let's take a quick look at a few of the questions which might be confusing to a new user.

3. Screen clearing codes? You would usually answer yes to this prompt as all it virtually does is make sure that the screen you are viewing at any particular time is cleared from your screen once you select any other option from that screen. Answering no to the prompt simply makes the next screen viewed scroll from the bottom of your screen

and is a less tidy way of viewing the boards screens.

4. ANSI colour graphics? If the terminal software you are using to call the BBS with supports ANSI colour (look in the docs to check) then answer yes to this one. Note that most boards use IBM extended characters to create their graphics with, so be sure to set your terminal to use an IBM font before you call the board.

5. Full screen editor? The board is asking you if you want to use their more sophisticated online text editor to write or answer any messages on the BBS rather than a simple line orientated editor. New users would usually be better off answering No to this prompt until they become more familiar with the board and its workings.

6. How many lines? How many lines can your terminal screen display is what the question is. Simply count them up from top to bottom and answer appropriately. If unsure, then 24 is usually a fair and safe answer to this prompt.

7. Pause after each screen page? The BBS software wants to know if you want it to pause when it gets to the amount of lines you specified in "prompt number six". Answer yes to this one till you get the hang of things on the board you call.

In the space available to me for this issue, that's about the best simple crash

course I can give to help you enter a BBS for the first time. But don't despair. Most boards are fairly intuitive and once you've called a few, you'll soon be an expert in logging into them. Once in, simply take the time to read any information offered by the system and take note of it. Above all, don't be afraid to try the options available to you on the screens. Most Bulletin boards are set up in the knowledge that new first time users will call and protect themselves from mistakes they may inevitably make. Hope the above helps in alleviating some of the nervous fears and tensions you and others are experiencing when pondering calling your first BBS.

Finale

That wraps up yet another month from the nooks and crannies of Andy's Attic. Australian shareware authors are reminded that they can send in samples of their products to Andy's Attic for inclusion in future issues. Andy's Attic seeks to support the good old Aussie battler by promoting good Australian Shareware software. If you've written something you think is useful, send it in to Andy's Attic at the address given above. You never know, it just might appear in these pages in a future issue.

Till then ...

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How much will it cost?

Each turn costs \$3.00 BUT your first three turns are **FREE** with the compliments of Dynamic Games. There is no obligation to continue after your free trial has finished, and if you do continue, you may stop at any time.

OK!! Let me play!

You think you would like to give QUEST a try? Right, the first thing to do is to choose a natty name for your party. Try to think of a name which is both original and pertinent, such as Iron Maidens or Waylanders. Your party name can be up to 20 characters long, so "Bimbos with Chainsaws" is out since it is longer than 20 characters and not in the spirit of the game. Enter your party name on the Turn Card. May as well put your real name and address there too!

Next choose **six characters** to form your new group. Look at the next page: there are four different races and four professions. You can choose any combination of races and professions and we recommend at least one from each profession, but each combination must be different, i.e. Elf Fighter, Human Mage, Dwarf Priest (but not two Dwarf Priests). Give each character a name (up to 20 characters).

The order you pick your characters determines their eventual character number. To choose a Human Mage called "Merlin" who's to be your group leader enter :-

[**X 18 Merlin**] in order 1 of your Turn Card.

For your second character you could enter :-

[**X 23 Nik Fings**] which would give you an Elven Thief.

I've still got **9 orders** left!

Each character arrives with enough rations for several turns and 250 gold pieces. The remaining 9 orders on your Turncard may be used to purchase some weapons and armour for your characters. They will automatically equip themselves with it. Look at the Armoury Table to see what is on sale (much more will become available as the game progresses) and decide how you wish to equip your characters. To choose your equipment, write the order in the following way:-

(B) (**Char # or 99**) (**Zero**) (**Item No**). For example Merlin, (our first character) wants to buy leather armour as Mages are weak defensively, so write :- [**B 10 151**]. If you wish everybody in the party to buy the same item, use 99 for the character number.

You may like to buy the town news sheet, item no 620 from the local shop at a cost of 1 gold piece. To have character 2 (Nik Fings) buy it write :- [**B 2 0 620**].

Once you have completed the Turn Card, mail it and we will send you your own personalised results sheet by return mail. This will give you a complete list of items available from the Armoury and the shops in your starting town and a view of the surrounding countryside.



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Enrolment and Turn Card

Armoury - Price List		
Item	Item No	Gold
Cloth Armour	150	80
Leather Armour	151	160
Helmet	159	10
Small Shield	160	25
Dagger	102	20
Short Sword	103	50
Mace	110	50
Axe	119	40
Short Bow	111	20
Light Crossbow	113	40
Sling	118	5

Party Name	Char Type	Character Name	Char No.	Item No
Order # 1	X			
Order # 2	X			
Order # 3	X			
Order # 4	X			
Order # 5	X			
Order # 6	X			

DWARVES

Short and stocky, but immensely strong dwarves are tough as old boots and always ready for a good fight. Their short stature makes it difficult for them to use certain weapons, such as great-swords and long bows.

HUMANS

Humans make up the majority of the population of civilised Kharne and have the widest range of abilities. They are also the most adaptable of the adventuring races and although they have no great advantages in any field, nor do they have any special weaknesses.

ELVES

These tall graceful beings are by far the most intelligent of the adventuring races. Their keen eyes and steady nerves make them very accurate with missile weapons but they are less hardy than other races and this can put them at a disadvantage in melee combat.

HALFBLOODS

These are the mongrels of Kharne, usually the offspring of human and Orc, or human and goblin matings. They are ugly, mean and have definite evil tendencies. Halfbloods have excellent reflexes and awareness. Watching your back is a necessity for survival in halfblood company.

PRIEST			
THIEF			
MAGE			
FIGHTER			
HUMAN	17	18	19
ELF	21	22	23
DWARF	25	26	27
HALFBLOOD	29	30	31
			32

PRIEST

Priests are the servants of the Gods and their services are rewarded with the ability to perform miracles. The nature of these miracles will be determined by the god, or gods that the priest serves.

THIEF

No surprises here. The thief is the cat-burglar, pickpocket and locksmith all rolled into one. Good awareness is a vital attribute for characters of this class. Thieves tend to be good with missile weapons.

FIGHTER

Fighters are skilled in combat and handle all kinds of weapons without difficulty. Toughness is an important attribute for a fighter but awareness can also be useful, especially when using missile weapons.

MAGE

Mages begin knowing just a few simple spells but as the game progresses they can learn many more, through research, experiment and experience. All weapons are difficult to master although there are no restrictions on armour or weapons used.

Phil Campbell's Entertainment

All the latest news and views from the world of Entertainment

Howzat! Cricket for the Amiga

Programmed entirely in Australia, Mindscape have high hopes for their new cricket sim, *Howzat*. Choose your own batsmen, bowlers, and fielding positions - play against the computer or a friend. The game features top class graphics, and full control of all players. The display pans in onto the bowler as you control his delivery, then onto the batsman as he plays the stroke. Then the "camera" swings onto the fielders as you move your closest man in for a catch.

It's all there, says Sharon from Mindscape, and it's just about ready for release. Sound is great too, with digitised commentary - you'll think you're watching *Nine's Wide World of Sport*. Stay tuned for more developments.

EA Launch Toll Free

Want to know more about games in the EA Catalogue? Then give the EA Sales Hotline a ring on 008 074 277. It's designed specifically for end users like you and me, so why not give them a call?

ACAR Hints Disk Offer

Pst! Wanna hint? Then check out our two official ACAR Entertainment Hints and Tips Disks. They're both packed with handy hints and tips for all the most popular Amiga games.

The *Secret of Monkey Island* is re-

vealed, we'll give you all the training you need to win at *4D Sports Boxing*, we'll help you save the day at *Austerlitz* - and *Leisure Suit Larry* finally gets his girl.

So how do you get it? Just send a blank disk for each hint disk you require, with a stamped, self addressed envelope and a cheque or postal order for \$5.00 per disk to Phil Campbell, PO Box 23 Maclean NSW 2463. Sit back and relax. Your disk will arrive within a fortnight!

Mandscape December Competition Winners

Remember our amazing December *Troddlers* competition? It closed on December 31, but with the Christmas rush a lot of entries were delayed. So we're holding over the announcement of the winners until next month. Stay tuned!

Mandscape Sensible Soccer Competition

Mandscape are giving away five copies of the freshly upgraded *Sensible Soccer*, a completely rejigged version which has just been released. "It's my favourite game," says Mindscape's Richard Treloagan, "and we're giving away five copies, valued at \$69.95 each."

To enter, simply answer these six questions on the back of an envelope, add your name and address, and send it to Phil Campbell, PO Box 23 Maclean NSW 2463 before February 28th. Let

ENTERTAINMENT HINTS & TIPS

Here is an important message to all Amiga users! We need new hints and tips. So if you've cracked your latest game, let us know - and we'll tell the rest of the world how smart you are.

This month a humble Paul Lawrie writes with a correction to his previous hints for *Robocod*. Ooops! Can't win 'em all, Paul.

"I sent you some cheats about two months ago for *Robocod*," says Paul. "Since then I have discovered:

1. that <M> isn't the only code that can be entered in the *Robocod* cheat and 2. the levels that can be accessed are in a rather unpredictable order." Read on for more details ...

Robocod (Amiga)

While playing, type LITTLE MER-MAID (including the space) to make the screen flash. Now press one of these keys for the relevant effect:

<F> - fly
<K> - kamakaze
<M> - map select(level select mode)
<P> - plane
<X> - exit
<F6> - 50Hz

the questions begin ...

1. How many little leather hexagons are there on a standard soccer ball?
2. How long is a standard soccer pitch?
3. Who are the two "B's" in ABBA?
4. How much is a 440g can of Spaghetti at your local supermarket?
5. Name three other soccer sims on the Amiga.
6. Name the first ever soccer game on the Commodore 64.

<F7> - 60Hz
 <RETURN> - infinite shield
 When in level select mode you skip to any part of the game. These can be accessed by the following numbers:
 01 - Level 1-1 26 - Level 7-2
 02 - Level 1-2 27 - Level 7-3
 03 - Level 1-3 28 - Level 7-4
 04 - Bonus Level 1 29 - Level 7-5
 05 - Level 6-1 30 - Level 5-1

06 - Bonus Level 2 31 - Level 5-2
 07 - Bonus Level 3 32 - Level 5-3
 08 - Level 6-2 33 - Level 5-4
 09 - Level 6-3 34 - Level 5-5
 10 - Level 1 & 2 Boss 35 - Level 5-6
 11 - Level 5 & 6 Boss 36 - Bonus Level 9
 12 - Level 7 & 8 Boss 37 - Level 5-1
 13 - Level 3-1 38 - Bonus Level 10
 14 - Bonus Level 4 39 - Level 8
 15 - Level 3-2 40 - Bonus Level 11

16 - Bonus Level 5 41 - Level 9-1
 17 - Level 3-3 42 - Bonus Level 12
 18 - Level 3-4 43 - Bonus Level 13
 19 - Bonus Level 6 44 - Bonus Level 14
 20 - Level 4-1 45 - Bonus Level 15
 21 - Level 4-2 46 - Bonus Level 16
 22 - Bonus Level 7 47 - Bonus Level 17
 23 - Bonus Level 8 48 - Hard Level
 24 - Level 4-3 49 - Level 9-2
 25 - Level 7-1 50 - End of Game

Entertainment Letters

Send your entertaining Entertainment letters to Phil Campbell, PO Box 23 Maclean NSW 2463. You can ask questions about games, make comments, even get help for that game that's had you baffled for years!

Next Month ...

In the April issue we're starting a new feature in the Mailbox called Entertainment Forum. In the Forum we'll be discussing issues of interest to Commodore Gamers. Our first topic will be "The Makings of Greatness." Write in NOW, and tell us what YOU think makes a really great game. What is it that separates classic games from the rest? Give us YOUR point of view, in 200 words or less - and the best Forum letter wins a game!

Game Members Wanted

Dear Phil, I am starting up a new Amiga Gamers Club and would like some members. It is for new and experienced users of Amigas and will help them learn to use their machines properly. There is a monthly newsletter, with reviews of games, a PD swap section and a for sale/wanted section.

There is a \$5 joining fee which will cover photocopying costs for newsletters. If anyone is interested please write to me at the following address.

Matthew Lowe

2 Taylor Street
 Dinmore Qld 4303

Ed: Hope it works out Matthew! Why not send us a copy here at the ACAR Entertainment office - if we like it, we'll give it another plug!

Pirate Plays Pirated Pirate Game

Dear Phil, Okay I'll admit it I'm addicted; what to I hear you ask; no not marijuana not angel dust and NOT heroin. No the drug I'm addicted is the greatest of them all *Monkey Island I* and *II*! All hail God GUYBRUSH THREEPWOOD. Down with evil ghost pirate LeChuck - Boooooo.

But I will say one thing though, both my copies are pirated AND I'm the proud owner of 300+ Pirated games. Because I'm not going to part with \$60, or \$70, or \$80 dollars to be the proud owner of Ruff 'n Ready for godsake.

*ALL HAIL GUYBRUSH,
 PIRATED PETE*

Ed: You, my friend, are a very strange person indeed. Maybe all this pirate stuff has messed up your brains? Or you've been out on the deck in the hot sun for a bit too long? In any case, it's people like you who are killing the goose that lays the golden eggs - because programmers aren't going to keep coming up with goodies like *Monkey Island* just for the sake of people like you who rip them off! Keep it up, and say goodbye to the Amiga software industry.

Samurai in Trouble

Dear Phil, Are there any cheats or hints for a *First Samurai* out there? Please help ...

Paul A King
 Waratah West NSW

Ed: There's sure to be a *First Samurai* expert out there somewhere, Paul. Stay tuned, and keep hoping that we'll find a good Samuraitan. (Uggh!)

Amiga User Group Warning!

Dear Phil, In June there was an ad for an AMIGA USERS GROUP organised by GRANT MASKELL. A few of my mates and I joined this club and were promptly issued with a nice looking newsletter. We then pitched in and purchased 10 disks worth \$30.00. Six months down the track we still haven't received these disks. We have written around ten letters to no avail. During a recession, we can't be ripped off like this.

I think your magazine is great, since I bought my first ACAR in April I haven't been able to stop myself from buying it. Keep up the good work.

I would also like readers of your magazine who have joined Grant Maskell's club called "United Amiga Users Group Inc." to write to me at 2 Taylor St, Dinmore Qld 4303.

Matthew Lowe
 Dinmore, Qld

Ed: Thanks for the warning, Matt! By the look of your earlier letter (above), looks like you're taking things into your own hands and creating a User Group that does it right!

More Monkeying Around

Dear Phil, I am writing to ask if you know where I may be able to get a replacement disk for the *Secret of Monkey Island*, as I don't want to send for one in America.

My problem is that my Disk 3 for *The Secret of Monkey Island* will not copy completely. It gets to a point and

won't read anymore. It had a 14 day warranty which has expired.

D M Shultz
Carroll, NSW

Ed: You could try getting in touch with Pirated Pete (see his letter above.) Alternatively, contact Sega-Ozisoft and tell them about your problem. I'm sure they'll replace your disk for a nominal cost. If you have any problems, let us know and we'll follow it up.

Jesse Hayward's Lucky Day

Dear Phil, Here's an answer for Jesse Hayward, who was asking for help back in the November ACAR.

- Before you get captured in the Crystal Caverns, make sure you go up to the

'corridor of spikes' first. Hit the lever to give you time to race across and hit the second lever, which lowers a rope and get back fast.

- Go back down and get the key at the right of the sleeping goblins. There are two keys and you need them both! Get captured and offer the guard a drink. Once he's in Disneyland, mace your way out of the cell and collect the second key. You must climb the rope before the fleeing prisoner to protect him, otherwise he will die. Sounds easy but timing is critical.

- Kill the guard at the top and go back down. Use the 1st key to release the second prisoner. You must release both prisoners.

- Climb the rope once more, head left, kill the guards and get the ring. The prisoners will be waiting at the door leading back to the corridor of spikes. Use the 2nd key to open the door. Let the prisoners go first and follow. They become spike fodder and let you cross safely. You need both prisoners or you are history.

Simple, isn't it!!!

David Rich
Waverly, NSW

Ed: Thanks David - you, and other readers who take the time to write in with solutions, are the people who make ACAR the top class information exchange that it is! Keep up the good work.

Hall of Fame

Can you believe it? Stare Bear has done it again! He's beaten his own high score for Space Ace with 258,106. If you can beat this high score let us know! Other high scores this month have been pretty disappointing - there are millions of Commodore users out there, so why don't you send in your high scores.

Next month I will be taking out a few of the old highscores that have been around for eons. So if you have any new high scores for new games please send them in promptly.

Send your high scores to Juris Graney, 41 Cameron St, Maclean, NSW, 2463. Please mark clearly whether your scores are for C64 or Amiga. And remember - NO CHEAT MODES ALLOWED!

AMIGA
ACTION FIGHTER 132,530 R Baker
ALERT 359,700 Robbie Baker
ARKANOID 1,052,610 Steven Walter
AMAZED 130,500 Chris Turnadge
ANARCHY 646,560 - Sid Vicious
AQUATIC GMS 4,170,666 - P Cary
AXEL'S MAGIC HAMMER 329,800
Aaron Buscumb
BAAL 134,250 Davo
BARBARIAN II 100% (c) - Sid Vicious
BATTLE COMMAND 334,200 P Cain
BATTLE SQUADRON 99,999,999 (c)
Amos Burbridge
BEYOND ICE .67,826 (c) C Turnadge
BIO CHLNGE 29,000 A Sanderson
BLOCKOUT 85,281 Stephen Lark
BOMBJACK 468,120 Kathy Butters
BUBBLE + 276,850 (c) Chris Toyne
BUBBLE B 2,960,980 K Cameron
BUDOKAN 6.08min (c) M Sorensen
BUGGY BOY 113,260 Pwrhse Nick
CAR-VUP 484,122 Happy Hacker
CHASE HQ 7,426,060 Pwrhse Nick
CONT. CIRCUS 4,815,390 Dolly
CRZY CS 93,622,590(c) R Cameron
CRAZY CARTS CHALL 3,000,000,000!!
Michael Summers
CRYSTAL HAMMER 6,787,921(c)
Kristy Cameron
CYBERBALL 475,000 David Marsh
DENARIS 53,900 Peter Evans

DIABLO 1,490 Timothy Johnson
DRGN NINJA 246,400 R Matthews
DOUBLE DGN 962,355 R Cameron
DOUBLE DRGN II 201,330(c) Warrior
EDD THE DUCK 5,820 A Gormly
ELIMINATOR 246,570 Greg Munro
EMERALD MINE Lvl 23 (d) T Johnson
FIRE AND ICE 376,750 The Prophet
FLOOD 13,135 Matthew Beeton
GEE BEE AIR RALLY 308,726 R Irwin
GIANA SISTERS 112,480 A Annen
GODS 4,244,397 Adam Annen
GOLDEN AXE 496,2(c) C McInally
HYBRIS 2,934,425 Andy Tyson
IK+ 1,039,200(c) Powerhouse Nick
IMPOSSIBLE MSN 66,380 D Unwin
IMPOSSIBLE MISSION II 67,900(c)
David Dilkes
INDIANA JONES L.C. c Phillip Nicoll
INDIANAPOLIS 500 37.00sec/
243.24mpt Ian Klaus
INERTIA DRIVE 33,600(c) A. Gormly
KARATE KID II 54,000 M Summers
KILLING GAME SHOW 699270 David
Thompson
KLAX 4,396,040 Happy Hacker
LEATHERNECK 86,500 S Crosland
LIVE & LET DIE 96,520 M Beaton
MAJOR MOTION 50,658 O Webster
MENACE 996,481 Kamikaze Andy
MIDNIGHT RESISTANCE 332,610
Chris McInally

MNDWLKR 306,214 P Schumacher
MOUSETRAP 71,977 Davo Rich
NARC 180,800 Damien Carsburg
NECRONOM 1,181,360 - J Rotten
NINJA MISSION 66,528 Chris Toyne
NITRO 283,000 (c) B Bannerman
NUCLEAR WAR 990 (c) Paul Rucci
N.Z. STORY 546,695 E Beaton
ONSLAUGHT 39,918 A Gormly
OPERATION THUNDERBOLT 169,400
Andrew Gormly
OP. WOLF 355,680 Graham Wilson
OUTRUN 32,150,464(c)Darrin Smith
OFFSHORE WRRIOR 626,345 J Booth
PACMANIA 3,250,140(c)A Burbidge
PINBALL DREAMS 398,977,570 Paul
Rucci
PINBALL MAGIC 423,560 P Rucci
PINBALL W3,893,570 Stephen Hose
PIONEER PLAGUE 35,412 K Sooby
PLUTO 299,000 Davo
POPULOUS 347,990 M Summers
PORTS OF CALL \$3,654,944,000
Status 1033 Troy Clarke
POW 612,865 David Thompson
RAINBOW ISLANDS 9,999,999 (c)
Timothy Johnson
RAMPAGE 212,912 Graham Wilson
RICK DGS II 68,450 Scott Southurst
ROBOCOP 395,760 (c) Paul Rucci
ROTOX 183,050(c) Faye Doherty
SDWINDER 904,350 S Elsley-Eades
SILKWORM (Hell) 9,963,380 (c) R
Cameron
SILKWORM (Jeep) 2,369,571 Kristy
Cameron
SKWEEK 3,375,400 Faye Doherty
SPACE ACE 258,106 (c) Stare Bear
SPCE HARRIER 210,855,250 Maverick
SPEEDBALL 17,650 A Burbidge
SPEEDBALL 2 394-2 Matt James
STRWRS 5,722,822 w 33 C. Minos
STRIDER 175,350 Neil Young
SUPER CARS 27 races (c)
L.Hetherington
SPER HANG-ON 25,042,850 D Worthy
SPER OFF-RD \$4,930,000 G Hingerty
SUPER WONDER-BOY 208,900 Adam
Annen
SUPER SPACE INVADERS 814,355
Andrew Hay
SWIV(HELI) 2,108,210(c)R.Adams
SWIV (JEEP) 2,417,330 S McKinlay
SWORD OF SODAN 403,500 S Begley
TEEN.M.N.TURTLES 546,600(c)James
Leeken
TEENAGE QUEEN - \$3900 (c) R Biggs
TERMINATOR II 254,960 (c) P Rucci
TEST DV 169,437(c) S. Demchinsky
TEST DRIVE 2 659,992 M Summers

TETRIS 39,586 (774 Lines) C Lewis
TETRIS Level 232 Stephen Lark
THE RNNING MAN 123,500 D Rucci
THUNDERBLD 2,034,040 De Moose
THUNDRCTS 522,300 S Southurst
TOWER OF BABEL 25,934 (c)Stephen
Lark
TURBO OUTRUN 100,260,819
Matthew Mantle
TURRICAN 1,735,100 (c) A Jenkin
TRRICAN II 3,307,700 (c) M Beeton
TV-SPORTS BASKETBALL 192-39 Matt
James
TV-SPORTS FOOTBALL 189-0 David
McKinley
TWINWORLD 24,640 Carol Love
TYPHOON 54,255 Owen Webster
U.N.SQUADRON 762,255 (c) Tony
Stojanowski
VIDEO KID 371,050 Andrew Hay
VIRUS 22,637 Jason Dijkstra
WHIRLIGIG 28,210 Nathan Allen
WINGS 432 kills Robert Irwin
WINGS OF DEATH 56,670 R Irwin
WONDER BOY 381,186,042(c) Kristy
Cameron
XENON II 1,107,280(c) Mark Porta
ZOOM 67,051 Steve Jones

Wade
GRYZOR 228,600 Mean Max
H. MARADONA Level M N. van
Heeswyk
HAWKEYE 260,400 Matthew Inman
IKARI WARS 308,300 J Aldridge
INT. KARATE 139,300 Paul Millward
LAST NINJA II 17m44s (c) David Carter
MIDNIGHT RESISTANCE 28,540 (c)
Dennis Pike
MEGA GIANNI SISTERS 328,746
Mean Max
NEMESIS 1,633,200 Adam Wade
OPERATION THUNDERBOLT 78,600
Adam Annen
OPERATION WOLF 776,350 Winston
Diaz
OUTRUN 16,952,780(c) Adam Wade
PARADROID 303,125 Matt Inman
PAPERBOY 103,100(c) John Nunes
PIRATES 143/100 D Steward
POWERDRIFT 872,940(c) A Annen
QUE-DEX 639 Chris Byrne
R-TYPE 1,890,210 Atul Prasad
RAINBOW ISLANDS 7,653,241 Adam
Malinowski
RAMPAGE 180,000 Adam Wade
RICK DANGEROUS 66,280 A Annen
ROBOCOP 237,170(c) Adam Wade
ROLLING THNDR 417,280 A Wade
SALAMANDER 235,300 P Millward
SHINOBI 664,372(c) Winston Diaz
SLKWRM (Hell) 965,200 (c) A Blanch
SILKWORM (J) 244,500 (c) A Blanch
SKATE OR DIE Freestyle 22,850 The
Joker
STREET FIGHTER(c) 168,900 Adam
Wade
SUPER CYCLE 239,840 (c) Adam
Annen

TARGET REVENGE 330,450 C.
Byrne (clocked)
TEST DRIVE 36,144(c) John Nunes
TEST DRIVE II 249,543 (c) A Batroc
TETRIS 35,335 (459 lines) A Annen
THE TRAIN 9,500(c) Adam Annen
THUNDERBLADE 1,851,040 Matthew
Inman
THUNDERCATS 269,500 J Wright
T.M.N.TURTLES 4397 Adam Annen
TRAZ 54,560 Dave and Sue Upton
TURRICAN 1,239,040 A Malinowski
UNTOUCHABLES 70,230 S Watford
WIZBALL 999,999 (c) G. Beaven
WONDERBY 4,775,470 (c) L Walters

Scores followed by (c) indicate
that the game has been
completed.

Our Compilation King Juris Graney takes yet another look at a budget priced game pack. This time he likes what he finds!

Magic Worlds

Monday 20th December, 1 B.C ... Where doth darkness go when light comes? Does it hide in a corner? Or does it metamorphose into its opposite? As the sun rises above the horizon, I stare out from my garrison. The earth is looking placid - all is still. In fact, there's an unusual stillness. No wind to ruffle the leaves. No snow falling on the white capped mountains. All is quiet. I walk back into the castle and sit down at my desk, scouring the table for an object which will make my day a whole lot better.

Three small blue squares lie flat on the table before me. I take one, and insert it in the slot at the side of my Amiga 500. It's *Dragon's Breath* from the *Magic Worlds* collection. A brief interlude and then up pop three faces. I select one and continue on my journey into the Magic Worlds of Silmaril.

Dragon's Breath is just one of the three programs in *Magic Worlds*. There are also the two hit games *Storm Master* and *Crystals Of Arborea*.

Dragon's Breath is an action/adventure/strategy game. Your object is to find (and keep) the parts of a talisman that allow entry to a Throne Room. These three parts of the Talisman are scattered throughout the land surrounding the mountain and may only be found by drag-

ons. The parts cannot be moved until all three are guarded by one player's dragons, all at the same time. In other words, you'll need at least three dragons to win.

The first objective of the game, therefore, is to breed dragons. It's an expensive business, and you'll need a considerable income to start up your hatchery and keep everything in order. To cut a long story short, *Dragon's Breath* is a highly addictive game with lots of class and depth with great graphics. And it's tremendously huge.

Crystals of Arborea is a slight deviation of *Dragon's Breath* but is also quite good. It's a strategy role playing game with a lot of depth. You are Jarel, the last prince of the Sham-nirs. You must lead your six companions in a quest to find four crystals and restore them to their respective towers. A simple task, but there's one real problem - Morgoth, a banished angel from heaven seeking revenge for his banishment. He has corrupted orcs and the black elves of Arborea and have set them upon your men. The graphics are not as good as *Dragon's Breath* but still have potential. The movement times are elongated and the fight scenes are quite poor. But *Crystals* is still a good game, and is fun to play.

Last but not least is *Storm Master*. Eoila and Sharkaania are nations at war.

Fact Box

Magic Worlds leaves most other compilation packs standing - mainly because it's a collection of three top ranking games. *Dragon's Breath* is exceptional, and stands out as the pick of the bunch. Its graphics will leave you goggling!

Ratings

Graphics:	89%
Sound:	76%
Addictiveness:	95%
Gameplay:	90%
Overall:	87%

Distributed by Mindscape, (02) 899 2277. RRP \$69.95.

And they have been for quite a long time. You are from Sharkaania and have the task of looting and destroying the seven enemy cities from Eoila who are trying to destroy Sharkaania. The planet you are on is a strange one as well. Urgaa. A land where the WINDS are the masters of natural harmony. *Storm Master* is huge. You have control over the Council of Seven which includes Leonardo (designer) and The Joker (of Batman fame). You have to create a flying aircraft and fill it with soldiers which will then destroy Eoila. Great graphics and sound, very addictive and a pleasure to play.

Magic Worlds is a very good collection of games which will keep all the adventure people very happy. Good one, Silmarils.



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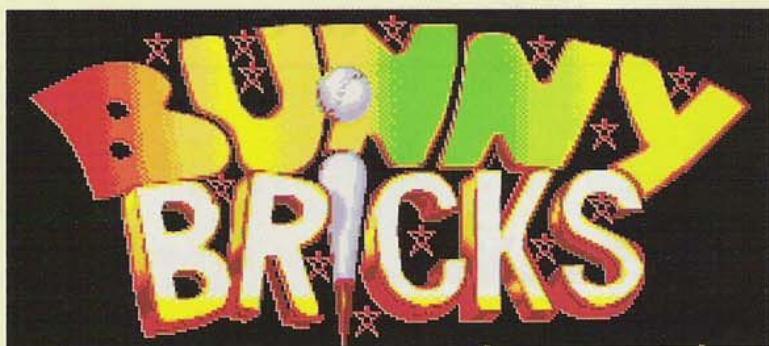
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Myer
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Selected Harvey Norman
Brashs

TAS G.P. Fitzgerald

And Leading Amiga Dealers



**Here's a game worth avoiding, says Phil Campbell.
Read on, and be warned.**

I don't often grizzle about games. Call me good natured. Call me tolerant. Call me a pawn in the pocket of the software industry. In fact, call me whatever you like. But the plain fact is, there are generally enough good quality games around to keep me well entertained, and to give you something positive to read about here in your monthly ACAR. After all, this is the entertainment section.

Permit me then, this once, to vent a little spleen. Because I've just encountered the worst game in years - and it's my civic duty to give you due warning.

Mind you, my first impressions of *Bunny Bricks* were positive. Nice box. A cartoon style rabbit on the front cover belts a baseball through a wall of bricks, and the screenshots on the back make the game look like a jolly little romp. There's even a touch of humour. "*Bunny Bricks*," says the blurb on the rear, "is the first cartoon-style, arcade, brick breaking baseball game to star a rabbit. Ever." Very droll. And I chuckled. But that was before I saw the game.

The next paragraph should have been warning enough. Try this. "In a series of animated features, Bunny must break every brick he can, helped and hindered by his friends Naf Naf, Cocky, Sharky and the Angel Einstein. Ducking and diving, Bunny has many options to assist him, but he

needs more than skill and precision to solve the secret bonuses, puzzles and riddles." Too right. If you're going to survive in this game you'll need incredible patience - mainly between the action sequences when you're waiting for the program to re-load.

But let's take it one step at a time. The title screen is nice, and follows the same vivid cartoon style as the box. Bunny looks a fun sort of guy. We're standing on a baseball pitch backdrop, and all we have to do to start is click on the referee to Bunny's right.

And here's where the fun starts. Or doesn't. First, the loading time seems interminable. Second, when the game has loaded, you'll immediately be filled with a sense of déjà-vu. And besides that, as they say in the old joke, you'll immediately be filled with a sense of déjà-vu. The feeling that you've seen it all before.

Because the truth is, *Bunny Bricks* is simply a re-dressed version of *Breakout*, the second computer game in the his-

Fact Box

Bunny Bricks is a boring, second rate little game with very few redeeming features. If you're looking for a *Breakout* clone, try *Arkanoid*, or one of the many PD versions.

Ratings

Graphics: 62%

Sound: 51%

Gameplay: 27%

Overall: 49%

Distributed by Mindscape (02) 899 2277. RRP \$69.95.

tory of the world. And not a very good version, at that. *Breakout* came along just after *Pong*, the original coin-operated video game. A wall of bricks lined the top of the screen, and your job was to steer a little bat back and forth across the bottom, bouncing a blip into the bricks and knocking down the wall. Nice idea, and it sold like hot cakes in the early 1970s. But this is 1993!

Take a look at the screen and you'll see some fancy backgrounds - purely cosmetic. The regulation bricks are all present and accounted for, but instead of a simple bat at the bottom of the screen, you're controlling good ol' bunny. And that's no easy task. First, you need to move him into position. Then you need to select a swing by pressing the fire button and pushing the joystick - after all, this is a baseball game. Remember?

It's hard to get into the swing of things, and in typical baseball fashion, it's "three strikes and you're out." It was all over in moments - and then that long and frustrating wait for the game to reload from the disk.

I haven't yet encountered Naf Naf, Sharky, and the Angel Einstein. And I don't think I'll bother. *Bunny Bricks* is simply a dressed up version of a tired old game - it may be the first cartoon style arcade, brick-breaking baseball game to feature a rabbit. Ever. And my guess is, it will also be the last. □



You've marvelled at his metallic muscles at the movies. Now go one up as you actually control the tin-topped copper. Cadet reporter Laetone Gravolin introduces ...

Robocop 3

The game, the name and the fame all come under *Robocop 3*. Yes folks, you guessed it, our heavy metal hero is back for the third time round. The new game system is completely different to the two previous *Robocop* games. This time, you're in a three dimensional world, in which Robocop stalks around giving bad guys the boot. Robo has three travel modes - you can walk, with a 3-D view from Robo's computer visor.

Alternatively, you can take out a police car for a spin. Driving is a lazier way of getting around town, and easier to manage with the mouse. Your view is pretty much a typical driving sim display, and your steering wheel is controlled by moving the mouse left or right. Again, you're moving around in a 3-D vector world.

Your task in this section of the game is to apprehend stolen vehicles by bumping them off the road with your car - good fun.

The final travel mode will have people on the streets saying, "Is it a bird? Is it a plane? No, it's Robocop!" Yep, the last little toy is a rocket pack! It has a flight simulation look, but the same old thing happens - all you do is shoot down enemy helicopters and destroy ground targets.

At the start of the game you can choose between movie adventure and arcade action style gameplay. The arcade action game has five scenarios. The first two of these are on foot - you'll walk through corridors blasting international terrorists and punks, while protecting the hostages. Next in line is the driving section. All you have to do is run a stolen vehicle off the road by running into him with your car.

But the hard part is the flying section. Robocop has three gunships and twelve ground tanks waiting to blow him away. Poor Robo has no laser guided bombs or missiles, but at least he has a targeting cannon on board so there's nothing to worry about.

Last but not least there is a duel between Robocop and a Japanese robot called Otomo. It's not all hand to hand fighting - Robocop has his trusty machine gun while Otomo has his sword.

The movie adventure game is very similar except if you complete one scenario it will automatically take you to the next, making the game into a story with many twists and turns.

The scenes are linked by a news section called Media Break. This gives the player an accurate briefing of what he or she will be doing next.

Inside the box there are all sorts of goodies, including a nice Robocop hol-

Fact Box

Robocop 3 is very different from its predecessors, with a 3-D vectorised world to explore in three different travel modes. It's a driving sim, a flying sim, and a stomping-round sim all in one! Good stuff!

Ratings

	Ratings
Graphics	90%
Sound	87%
Addiction	84%
Gameplay	89%
Overall	93%

Distributed by Sega-Ozisoft
(02) 317 0000. RRP \$79.95.

gram. The most unusual item though, is a small widget called a Dongle. This Dongle plugs into the joystick port at the back of the Amiga. If the Dongle is not there *Robocop 3* will not load. Now some pirates will try to hack out the code that searches for the Dongle but it will take months for even an expert to crack it. Life's getting hard for pirates.

Overall, I enjoyed *Robocop 3* - it's a completely radical game, and it should keep me playing for a long time yet.



Yet another Role Playing Game rolls out of the sausage machine, and Daniel Rutter is ready and waiting to try it out. So read on for this first taste of ...

PALADIN 2

Paladin 2 is a small scale war game. In it you control individual characters in their quest to make the world safe for Nice People, by ridding it of Big Scaly Nasty People with Teeth.

You are a Paladin. You know, the guys with the shiny armour and improbably sharp swords. You're really good at hitting people, but have no magical ability whatsoever. You are assisted by Swords-men, Thieves, Rangers and Mages. Lined up against you are Fighters, Displacers (always look to be one square away from where they really are), Doppelgangers (always pretend to be something else until you hit them), Imps, Gargoyles, Giants, Icelords, Spirits, Sorcerers, Zombies, Trolls and the inevitable, though I'd evict them if I were you, dragons.

The enemies are quite bright. They have, and use, range weapons and magic items, of which there are many, including magic potions to allow non-magical characters to cast spells. They are hard to fool, though appear allergic to opening doors.

There are 20 Quests, ranging widely in difficulty and often extending over several levels. There's certainly a lot to explore, and if you run out of Quests there's an excellent Builder program so you can make your own, as big and as complex as you can figure out. This is a Good Thing.

Paladin 2 is laid out on the popular square grid. Movement points are used for everything in - moving, attacking, spell casting, picking things up; the other two major statistics are Health and Vitality. Vitality is reduced by moving (or spells) and determines the number of movement points you

get next round; Health determines the amount by which Vitality is increased next round. This is a good and realistic system - a character missing a limb won't move as fast.

You can control everything with the mouse, but there are keyboard equivalents for faster use. There aren't any funny idiosyncrasies.

The viewing options leave a little to be desired. There's no way to overview all the explored areas of the map; you can only see an area of map around the selected character. There are some magic viewing options as well, but there's still no way to overview the situation. Strictly speaking, this may be more realistic, but it is rather annoying.

Another odd feature is that when a character dies, whatever he was carrying vanishes, which is just silly. A thirty pound arbalest and its bolts don't just evaporate. On that subject, the arbalest and its smaller cousin, the crossbow, can't be aimed - they just fire whichever way you're pointing, like some of the spells. Since the

Fact Box

Not a classic, but a creditable effort. A few things put in that shouldn't have been, but nothing important left out.

Ratings:

Graphics:	75%
Sound:	60%
Instructions:	Untidy but usable
Playability:	85%
Overall:	80%

Distributed by DirectSoft (02) 489 7853. RRP \$89.95.

plain old bow can be accurately aimed at anyone in your field of view, this is also strange.

I have two other main complaints about *Paladin 2*. One is that it takes an interminable time to load. It takes quite a while from hard disk, and floppies start to remind you of C64 drives. There is no reason at all for it to take so long - it's just sloppy coding.

The other thing I don't like is that every scenario plays the same every time. Sure, there are lots of Quests, but in any given one all the enemies and special things will always be in the same places. You get to learn where the bad guys are and how to dodge them, and finishing the scenarios often depends on this - I much prefer the small scale games like *Laser Squad* and the later *Lords of Chaos* where the enemies are less predictable.

That said, *Paladin 2* is competently done. The graphics are functional and not too ugly, the sound sparse but okay, and once all that loading's done and you've got through the refer-to-manual protection it plays fine. And the Builder's a plus - it's an option I've not often seen, and it's easy to use.

Overall, *Paladin 2* could have been considerably better. But, despite my nitpicking, it is by no means bad, and deserves decent sales. It's playable, it's challenging, and it'd make a good introduction to the war game genre. Worth a go.



Hard up for cash? Maybe you're tempted to grab a compilation pack? Well, take care, says Juris Graney, as he slams the ...

Grandslam Collection

Compilation packs usually offer good value for money. And they usually hit the software shops just before Christmas. Mind you, you'll still be able to find plenty of copies of the *Grandslam Collection* on the shelves. It's a pack offering ten classic titles from Grandslam.

The Flintstones and *The Running Man* are two examples. The Flintstones as you should know are a prehistoric family living in the ancient town of Bedrock. The purpose of the first phase of the game is to help Fred paint the walls of his house without Pebbles escaping the scene. In phase two, you'll visit the bowling alley. It's a basic sport-sim, and your aim is simply to make a strike. Pretty pathetic stuff actually.

You should be more familiar with *The Running Man*. The movie starring Arnold Schwarzenegger was almost a hit - unfortunately, I can't say the same for the game. If you've played this game on the C64 then you've seen better graphics. The Amiga version has very scratchy graphics, awful sound and the scrolling is slow and pathetic. I can't think of anything good to say about the game except that the character you con-

trol does actually look like Arnie.

By now I think you can guess that the pack is barely worth buying. Out of the pack of ten games, I found that only two were up to scratch. They were *Scramble Spirit*, and *Peter Beardsley's Soccer*.

Scramble Spirit is perfectly converted from the arcade version. The graphics are well drawn and the scrolling is very good. The sound is alright, and the gameplay is incredibly difficult - which keeps you coming back for more. Your actual role in this game is to fly a plane through a heap of levels destroying everything in your path. With a multitude of power ups, the game is great.

Peter Beardsley's Soccer is terrific too. To find out more, look through your back issues of ACAR. We reviewed it when it was first released.

The other six games are worth a quick mention. In *Terramex* you have to choose one out of five intrepid explorers and create an Asteroid deflector. Pretty awful, but interesting. *Trivia* is, as the name suggests, a game of questions. The computer asks you questions and you have to answer them. The only real problem is that it is English and all

Fact Box

Juris slam-dunks the *Grandslam Collection*. Though two of the games in the ten-pack are worth a play, the overall result is a stern "thumbs down."

Ratings

Overall graphics: 61%
Overall sound: 53%
Overall gameplay: 52%

Distributed by Mindscape (02) 899 2277. RRP Amiga \$69.95. There is also a *Grandslam Collection* for the C64, \$49.95 with more games.

the questions are very pom-oriented.

Saint & Greavie is another trivia game, this time devoted entirely to soccer facts. Gripping stuff (yes, you're right. I shouldn't be so sarcastic). *Terry's Big Adventure* is the dumbest game of all. You're a star egg, and must travel through Hollywood. Awful graphics and poor sound. *England Football* is alright - not the best soccer sim around but playable. Graphics are similar to *Peter Beardsley's*, but the game is far less addictive. Last but not least is *Espionage* - the one game in the pack which deserved a separate instruction book. I thought this might be a good sign, but as usual I was mistaken. Dumb sound, simple graphics and basic gameplay.

In concluding this very critical review, I can only say that this pack is not even worth glancing at. Many of the games are awful and not worth purchasing - even in a ten-pack!



When boredom sets in, sit down with a pack of cards and play a little solitaire. That's what they did in the old days, says Juris Graney, and it works just as well now ...

Solitaire's Journey

Solitaire's Journey can only be described with one word. HUGE. No joke, this game is massive, bordering on immense. Let me explain.

Solitaire's Journey consists of 105 of the world's best solitaire games. Many of these games are double decked. If you thought there was only Patience and the original Solitaire game, then you are very wrong.

Agnes Bernauer and American Toad to Will o' the Wisp and Yukon, they're all here. "How can you seriously like a game like this," you may be asking yourself. Well when I first saw it, I thought the same thing. One hundred and five versions of the same game. How boring. Well, I am here to tell you that when you get down to the nitty gritty of it all, Solitaire is a very challenging game. A majority of these games are dealing with pure luck of the draw, but others are dealing with strategic moves which are very important.

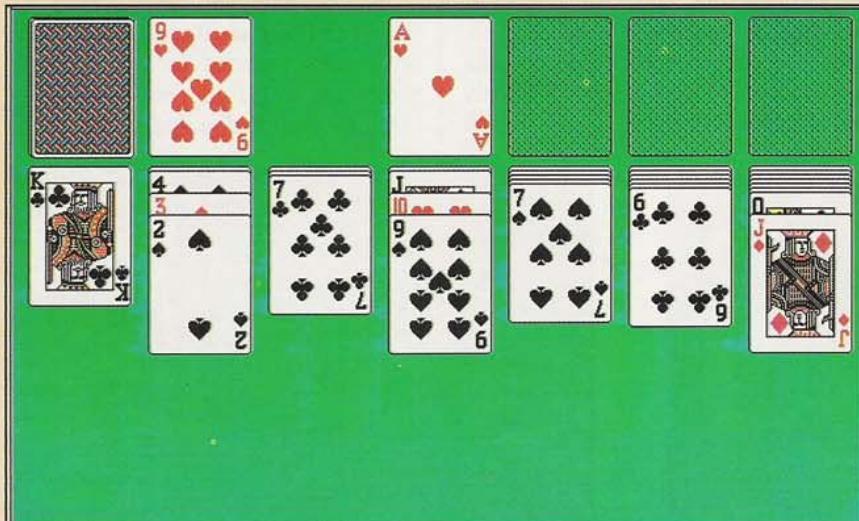
The fact is, I love it! There's only

one problem. When you have played the full 105 games of Solitaire, where do you go from there? The answer is simple. On a journey.

"A journey?" you ask. "What kind of journey?" Well, let me see. We can start in Toronto and go to Savannah or maybe Chicago to San Diego. Perhaps a trip from Seattle to Miami is more your taste. Or for the big city people there is the journey from New York City to San Francisco.

The idea of the journeys is to add a new dimension to the game. In a journey, you will travel across North America, playing in Solitaire competitions at each city that you travel through. The goal is to earn enough money in the competitions to travel to the destination city.

Quests are also available. In a quest, you'll explore a house, playing Solitaire in each room. The goal is to collect pieces of gold and travel to the destination room in the least distance possible.



Fact Box

Although it might look boring at the outset, *Solitaire's Journey* is lots of fun. Don't expect flash graphics or sound - but do expect to be engrossed for hours!

Ratings

Graphics:	50%
Sound:	34%
Gameplay:	96%
Addictiveness:	92%
Overall:	72%

Distributed by Directsoft (02) 489 7853. RRP \$79.95.

To end this trilogy of choices, you can select a Tournament. Tournaments consist of a set of up to ten games of solitaire. There is no real purpose to these except to have fun and end up with a lot of points in the end. There are ten tournaments to play.

The graphics of *Solitaire's Journey* are like any other card game. They do their job - you can see what card's what, and that's about all there is to it. The sound is no better. Each game is accompanied by an annoying little ditty. They are all very pathetic. And there are no sound effects to speak of.

What about the gameplay? Well, as I said, if you love Patience - or any card games, for that matter - then this is for you. You may even enjoy a bit of poking around in the journeys or quests.

The addiction level of this game is huge. Every time I enter my room, I have to beat my family off the computer just so I can sit down and play it. My dad and my sister are the worst - they're always competing against one another, and making up outlandish excuses when they get beaten.

All in all I found *Solitaire's Journey* a lot of fun to play. Although some may find it boring, it's actually a very amusing and very addictive game. So if you like *Black Hole* or *1234* and maybe even *Rouge et Noir*, then this game is definitely for you.

MICHAEL SPITERI'S

Adventurer's Realm

Welcome to Adventurer's Realm, the monthly column dedicated to helping out and informing adventurers from around the nation on all Commodore computers, from your average Vic-20, through to the Amiga and PC.

If you are stuck in an adventure or roleplaying game, you have a few options available to you: (1) Write to Kerrie for one of the many free hint sheets (see below), (2) Write a letter to one of the many Clever Contacts all over Australia - there is bound to be one near you, (3) Write to me here at the Realm for adventure games or to Andy in his dungeon for roleplaying games - we have a wealth of hints and tips for hundreds of adventure and RPGs, or (4) If you have a few dollars to spare, you can pick up one of the Realm's super hint books - there are two volumes available (see below). Remember, if we have to reply

to you, you must enclose a stamped addressed envelope!

Helping isn't all we do here at Adventurer's Realm. You can send in your views and news, swap and buy games, read all about new adventure games - it's all here. Ahem, I think this is beginning to sound like an ad for *Women's Weekly* ... let's get down to business.

The address to write to for hints, tips, problems, queries, hint sheets, and adventure game problems, is: Adventurer's Realm, 12 Bridle Place, Pakenham Vic 3810.

Write to Kamikaze Andy in his Dungeon for all roleplaying game queries (not hint sheets). His address is: Realm's RPG Dungeon, PO Box 1083, Canning Vale, WA 6155.

Always enclose a stamped addressed envelope if you expect a reply.

Free Hint Sheets

If you missed last month's Realm (you better not have!) then you would have missed the fantastic news that we have a new range of free hint sheets! Some older ones had to drop off to allow for these (though they might be still available if you ask nicely).

Kerrie, the Lady of the Realm, is

ready and waiting for the flood of requests that is due in about now, so make sure you send her a stamped addressed envelope with a list of up to four hint sheets from the selection below and send all this to: Free Hint Sheets, 12 Bridle Place, Pakenham, Vic 3810.

Monkey Island 1, Monkey Island 2, Space Quest III, Space Quest IV, Wonderland, Larry III, Champions of Kyrnn, Kings Quest V, Pool of Radiance, Zak McKracken, Maniac Mansion, Zork 1, Zork 2, Zork 3, Bards Tale I, Bards Tale II, Bards Tale III, Hitchhikers' Guide, Guild of Thieves, Jinxter, Pawn, Corruption, Faery Tale, and the new update 1993 complete listing of Clever Contacts.

Super Duper Hint Books

If you are after a book containing detailed hints for over 25 top notch adventure games, as well as pages and pages of adventure mapping sheets, then you cannot go past *Computer Adventure Games: Hints and Tips (The Second Adventurer's Realm Hint Book)*. It costs only \$10.00 including postage, and is available from Saturday Magazine Pty Ltd, 21 Darley Rd, Randwick 2031. Contact Darrien on (02) 398 5111 if you have any queries.

Of course, if there was a Second hint book then there must have been a First. Well there was, and it contains hint and tips for over 40 adventure games. You can only order this one directly from the Realm, priced at only \$9.00 (inc. P & P). The address to send your cheque to is: Realm's Hint Book, 12 Bridle Place, Pakenham, Vic 3810.

Realm's Adventure Chat

"What happened to the Dungeon in the December issue?" asks Steven Vaughan. We're not sure exactly Steve, though my guess is that Kamikaze Andy had some pretty serious exams to complete at uni. He was back last month, though.

I received a leaflet from Susan Owen of PO Box 92, Islington, NSW 2296. Susan runs what appears to be a mail order service of secondhand books and out of print comics and magazines. The only thing I can think of that this has to do with adventuring is that some of the stuff she offers could provide some great research material for new games. Drop her a line for more info.

Realm Quickshot: Kings Quest VI: Heir Today, Gone Tomorrow

Well, it's out - the next saga in Roberta Williams' classic Kings Quest series, and let me tell you, it sure is one hot game - one of the best I've played since *Monkey Island 2* (and that's saying something). This time around Sierra have opted for a love story. Our hero is Prince Alexander (son of King Graham), who in this chapter goes in search of Princess Cassima, the sweetheart who currently preoccupies his mind. Apparently, she has got herself mixed up with an evil prince who intends marrying her for her dough, and poor ol' Cassima can't get herself out of this mess.

The game starts with Prince Alex getting shipwrecked on the Island of the Crown, which consists of Cassima's palace and a small township and dockyard. Getting in to see Cassima is a bit of a problem, and the evil prince ensures Alex is made unwelcome when he visits the other surrounding islands.

There are four islands in total, each inhabited by their own unique race of creatures. I am at the moment stuck in

all four islands, bothered by such things as a trap ridden maze, a black gurgling pit, and a group of cute but deadly characters who hate men and delight in throwing you in the ocean.

This brings me to *King Quest VI*'s major and probably only fault - that is there are about a hundred ways you can die! Even worse, sometimes there is little warning prior to the fatal event. Surely Sierra would have looked at LucasArts and what they did with *Monkey Island 2* (it is impossible to die!).

Anyhow, *Kings Quest VI* is a great adventure game with pleasing graphics and an easy to use playing interface. The problems are imaginative, ranging from simple to downright frustrating. The inbuilt tutorials and walkthroughs make the game perfect for new adventurers. Most importantly, the plot tells a wonderful and enchanting story with a vast range of amusing and fascinating characters.

Now, how do I get past the dwarf with the amazing eyesight and nothing else?

Realm's Trading Post

The problem with adventure and RPG games is that once you've completed them, they are of little use to you and just take up space. Not any more with this new service. You can advertise your games to either swap or sell free of charge, and even put out a plea for a particular game or games.

There are a couple of rules though ... (1) If you dare to advertise pirated games we will send the local police force to slap you around a bit. (2) Don't advertise brand new releases ... it tends to make life hard for the struggling software industry. (3) Make sure you specify what computer your games run on. The address to send in your ads is Realm's Trading Post, 12 Bridle Place Pakenham, Vic 3810.

Jason West of 74 Matthews Avenue, Seaton, SA 5023 is in the market for *Ultima 6* and *Zak McKracken* for his

C64.

Andrew Thomas of 9 Dean Place, Lockridge, WA 6054 currently owns *Elvira, Barbarian, Cinemaware 3* game set (*Three Stooges, Sinbad, and Rocket Ranger*), *Chase HQ* and *Black Tiger*. He would like to swap them for *Populous I & II, Sim City, Global Effect, Sim Earth, and Eye of the Beholder II*. (Amiga, I presume).

Anne Williams c/o Cann River PO, Cann River, Vic 3890 currently owns *Wonderland, Drakhen, Obitus, Conquests of Camelot, Operation Stealth, Prospector, Sideshow and Creature*, and would like to swap them for *Eye of the Beholder* (again, Amiga I think).

Andrew McCulloch of 33 Carvie Street, Hillman, WA 6168 is in the market for *Elite, Kings Quest I to V, Space Quest III & IV, Castle Master I & II*, and *Dungeon Master* (Amiga maybe?).

Help, Help & more Help or the Smart Adventurers Dept.

Noel McAskill comes to the rescue of two troubled adventurers in the following games ...

Operation Stealth for Darren Mummery

Help: Use the watch twice on both the left and right walls.

Future Wars for Darren Mummery

Help: Escape from the cell by using the key, gas capsule (found in Prison Room), and newspaper on Air Duct.

The Pawn for Richard Uhr

Help: The paper wall is not in the courtyard ... it is much further on in the game.

Simon Vaughan also provides some help for a troubled adventurer ...

Ultima V for Kevin Mackinlay

Help: Have you tried using your spells? "Yus Por" goes up, and "Des Por" goes down.

Adam Berry from Tassie offers the following cheat ...

Robin Hood for Anyone!

Steal from someone and give it back to them very quickly and your hero status will rise and you will not lose the money!



Problems, Problems & more problems or the Troubled Adventurers Dept.

Definitely no shortage of problems this month! If you can help any of these souls out, please write in ... as soon as possible!

Stephen Gray of East Maitland in NSW has a problem with the police. Not the real police, just the almost real police in *Police Quest III*. Stephen is just after some general hints and tips for this game, and also for *Cruise for a Corpse*.

Trent Yarwood of Brunswick Heads in NSW is not having too much luck in *Legend*. He and his mate are stuck in

the dungeon of Fagranc, and have come upon a room that has two pressure pads (one blue and one green), plus a series of unmarked teleport squares, as well as a chest. Apparently, when they step on the pressure pads, different squares appear in the room, and in particular, in front of the chest is a teleport square, which makes opening the chest a bit of a problem!

Simon Vaughan of Lake South in NSW is stuck in two games on his C64. In *Neuromancer*, how does he get himself a Rom Construct, and how does he get past Larry in the Microsoft store. He has completed the game, but these parts have left him wondering. In *Ultima V*, what is the use of the Amulet of Lord British? How do you open the unopenable box hidden inside British's castle? Does anyone know about the mystical weapons?

Suzannah Dubor of Thornleigh in NSW would like some general help in two games ... *Bloodwyd* and *Legend*.

Any takers?

Regular Realmer Andrew Gormly of Walkerville in South Australia is stuck in two games. Firstly, in *Wasteland*, where can he find the Underground in Darwin Village? Then in *Bards Tale III* Andrew seems to be trapped in Arboria. He has the Nightspear, however Levitation doesn't seem to work (as suggested in the Realm hint sheet). Can any of the billions of Bards Talers help Andrew out?

East Maitland in NSW seems to have a few troubled adventurers this month with the addition of troubled Zorker Andrew Chenhall. His Zork problems we could help him with, however he would like some general hints for the game *Tunnels & Trolls: Crusaders of Khazan*.

Finally, many adventurers have been hassling me for hints and tips for *Maupiti Island* (the sequel to *Mortville Manor*). This is a rather urgent plea, as adventurers are now becoming suicidal!

Realm Clever Contacts

The Updated List of Clever Contacts printed last month featured over 70 volunteer tipsters from throughout the nation. This list grows this month with the following additions:

Ben Ashby of 11 Miles Close, Forster, NSW 2423 can help in a huge range of RPG and adventure games - too many to fit on these pages!

David Weston, PO Box 64, Henty, NSW 2658 can help in the following games: *Bards Tale III* (and map for Dargoth's Tower), *Ultima V*, *Last Ninja*, *Labyrinth*, pokes & tips for a few arcade games (send them in to Phil Campbell!), as well as general hints and tips for games in general.

James Wilson of 11 Marlborough Avenue, Victor Harbour, SA 5211 can help in a huge range of adventure, RPG, and arcade games for the Amiga. Ensure you enclose a nominal fee for photocopy costs.

Andre Thomas of 9 Dean Place, Lockridge, WA 6054 can provide help in *Indiana Jones and the Last Crusade*, *Monkey Island I*, *Mega-Lo-Mania*, An-

other World, *Gods*, *HeroQuest*, *Eye of the Beholder*, and *Bards Tale III*.

Simon Vaughan of 64 Lakeview Parade, Primbee, NSW 2052 can help out in the following games: *Yukon*, *On the Run*, *Shifting Sands*, *Hitchhikers' Guide*, *Neuromancer*, *Curse of the Azure Bonds*, *Maniac Mansion*, and *Zak McKracken*. Please enclose 50c to cover photocopy costs if you require complete solutions.

Andrew McCulloch of 33 Carvie Street, Hillman, WA 6168 can offer help in *Aargh!*, *Castle of Dr Brain*, *Neuromancer*, *Populous II*, *Railroad Tycoon*, *Thunderbirds Mission II*, and *Treasure Island Dizzy*.

Popular Clever Contact David Lear has changed address. He now resides at 33 Ludygate Hill Road, Aldgate, SA 5154. This hasn't been corrected on the updated listing, so please be aware of this change. Also be aware that David can help out in the following C64 games: *Boggit*, *Dallas Quest*, *Dracula*, *Eureka* (Prehistoric), *Kayleth*, *Kentilla*, *Knightmare*, *Kobyashi Naru*, *Lords of Time*, *Murder on the Waterfront*,

Mindshadow, *Never Ending Story*, *Quest for the Holy Grail*, *Ring of Power*, *Runaway*, *Subsunk*, *Bastow Manor*, *Wizard of Oz*, *Zork I*, *Zork II*.

David adds the following suggestion ... "I have been contacted in numerous occasions by people seeking help with Amiga games and, as I only have a C64, am not able to help. Even if it is a game that is available for both computers, I understand that the solution can be different. Identification of the Contact's computer would therefore be a big help."

Thanks David. That's something future Clever Contacts can keep in mind, and if you anticipate sending in an updated listing, please specify the computer you are using so as to avoid any confusion. Remember, if you are using the services of a Clever Contact you MUST enclose a stamped addressed envelope or a reply will not be forthcoming. A donation towards photocopy costs will also not go astray.

Finally, a very big thank you to all the Clever Contacts for a fantastic job done.

The Dungeon

by
Kamikaze Andy

Work is progressing along slowly on Activision's planned graphic adventure based on the Great Underground Umpire (Umpire? Empire! Too much World Series Cricket). For those of you "newer generation" adventurers, the GUE was immortalized in computer gaming history many moons ago by a series of classic Infocom text adventures called the *Zork Trilogy*. The release date announced by Activision for this project is "late, late 1993".

Hopefully, the company would have shipped *Leather Goddesses Of Phobos II* before then. *LGOP II: Gas Pump Girls* is yet another graphic adventure (yep, full colour visuals! Point and grope ... er, click interface! Control either a male, female, or alien character!) with lots of digitized speech. Activision had hoped to release *LGOP II* earlier, but financial difficulties prevented this from happening.

It seems to be the time for company takeovers. After the reports of Electronic Arts taking over Origin, Virgin Games announced that it had bought out independent game designers Westwood Associates (the guys who did *Hillsfar*, and *Eye of the Beholder I* and *II* amongst others). Westwood will now produce games under a joint Westwood/Virgin label, and the first looks set to be the *Legend Of Kyrandia* (as

mentioned some Dungeons back). With any luck, I'll be able to present a special preview of this enchanting full screen graphic adventure next month. Some of the animation techniques used in *Kyrandia* are breathtaking, to say the least, and the musical score is just as outstanding. Amiga fans are in for a treat when this gem appears on the shelves later this year.

CyberDreams is the latest player in the computer entertainment stakes, and with its first effort, *Darkseed*, looks like being a major contender in the next few years. *Darkseed* was a huge seller on the PC (which merits some congratulations as graphic adventures often find it tough to compete against flight simulations and RPGs) and should make its way to the Amiga in a few months.

The followup to *Darkseed* will be called *No Mouth*, based on a short story by famed fantasy writer Harlan Ellison. From the company's name, you should be able to guess that CyberDreams is aiming at the fantasy and science fiction market of the adventure/RPG genres. Look for an upcoming role playing product soon, probably from Chris Cranford (creator of the original *Bard's Tale* for EA, and now a CyberDreamer).

Amongst the other recent releases that should have materialized in your local Amiga store over the past few weeks include *The Dark Half* (yes, it's another graphic adventure, icon controlled, based on the Stephen King novel of the same name, and apparently a well produced piece of computer gaming), and Sir-Tech's long awaited *Crusaders Of The Dark Savant*. I haven't had time to test out the latter yet (to be honest, I didn't really like the predecessor, *Bane Of The Cosmic Forge*, and so I would approach *Crusaders* with some trepidation - but that's me). If you're going to

have a crack at this, be sure to set aside a lot of time as it appears to be a big quest.

The Hazards of Fortune Telling

It is often hard to tell when a game will be released, IF it ever will be released, and I often get queries as to why a game mentioned many months ago here in this column, still hasn't appeared on the shelves. Writing a column such as this (where the majority of the page is devoted to news of upcoming RPGs/Adventures) is indeed hazardous in that sense. In order to be topical (since The Dungeon is often written some time before actual publication in ACAR), I have to rely heavily on the press releases and the general goodwill of softcos such as Origin, Electronic Arts, and SSI. Their PR Departments are friendly but tend to promote more IBM than Amiga stuff, so there's a bit of arm twisting going on each time!

Usually, about two in every three IBM RPG/Adventure released will be converted over to the Amiga - it's just a question of WHEN. Remember how long it took *Ultima VI* to ship, from early design stages (when I first saw the game) to final release? Many of the projected release dates for Amiga RPG conversions are just that - "projected". Don't be surprised to find out that the actual shipping date is six months to a year behind schedule (if you've been an Amiga RPGer or Adventurer for at least a year, you would probably know this by now!).

All is not lost, however. As the number of Amiga users inevitably grows in strength, software publishers will start to wake up and hopefully put more priority in pushing their Amiga products. And the list of titles that are due out this year isn't something to be sneezed at: *Challenge Of The Five Realms*, *Willy Beamish II*, *King's Quest VI*, *Space Quest V*, *Clouds Of Xeen*, *Dark Side Of Xeen*, *DarkSun*, *SpellJammer*, and ... □

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3 1/2" DS/HD	\$14.94	\$13.75	\$13.50	\$12.00	\$11.00

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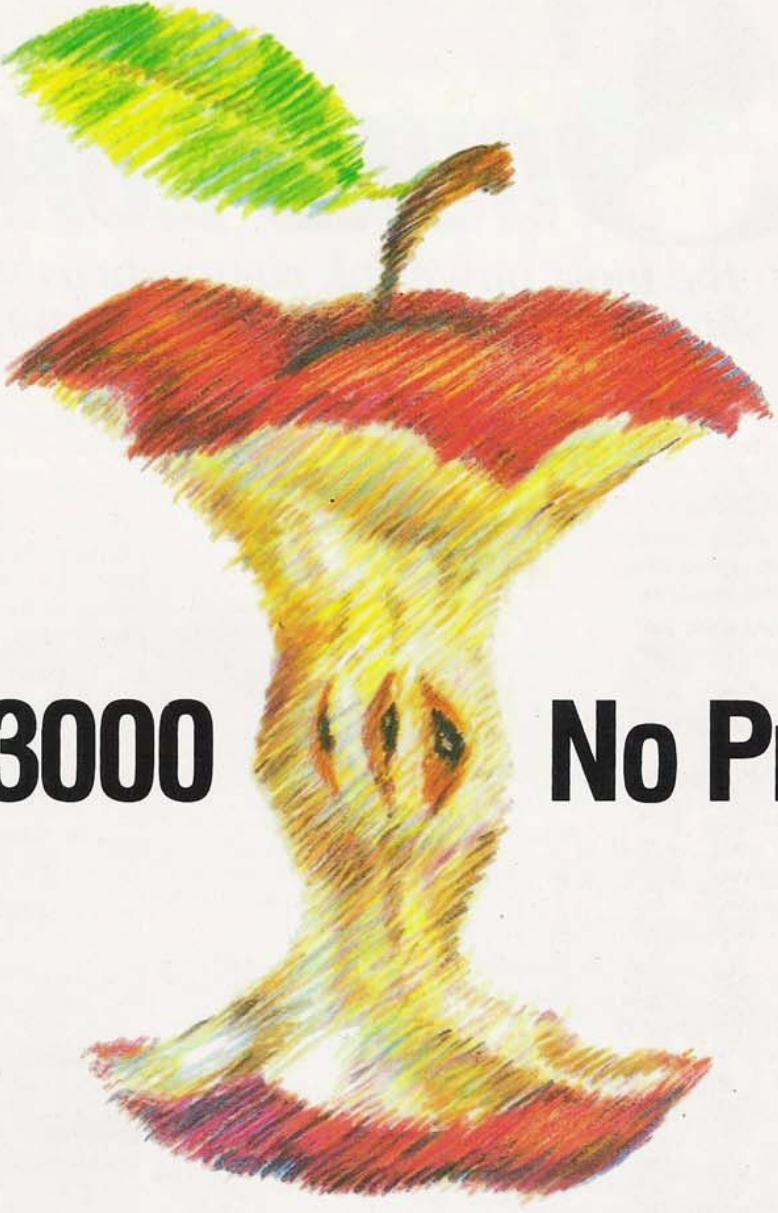
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Amiga 3000 No Problem

Specifications

Microprocessor

Motorola 68030 at 25Mhz

Co-Processor

Numeric Co-Processor 68882 at 25Mhz
Multi-chip Co-Processor system for DMA
Video, Graphics and Sound.

Memory

1Mb Chip RAM, expandable to 2Mb on board
1Mb Fast RAM, expandable to 16Mb on board

Internal High Speed SCSI hard drive

100 Mb 19 ms standard

Built-In Display Enhancer**Video Modes**

640 x 256 16 colours
640 x 512 16 colours
320 x 256 4096 colours
320 x 512 4096 colours
1280 x 256 4 colours
1280 x 512 4 colours
1008 x 800 4 shades of grey*
1008 x 1024 4 shades of grey*

* requires high resolution monitor

Expansion Slots

4 Zorro III expansion slots
2 PC/AT expansion slots
1 video expansion slot
1 CPU memory expansion slot

Interface Connectors

23 pin Amiga video (15 KHz)
15 pin VGA style video (31.5 KHz)
Left and right stereo audio
External disk drive, Serial, Parallel, Stereo
Audio, Keyboard,
Joystick/Mouse/Lightpen connectors and SCSI port

Data Paths

32 bit CPU access to chip RAM
32 bit Fast RAM, with custom controller supporting
static column mode DRAMs and allowing
CPU burst access
32 bit DMA-based on board SCSI controller

Internal Real Time Clock with battery back-up

Harrow Media
CBM9212



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With the most powerful, comprehensive 8-bit Digital Sound Package to ever orchestrate an Amiga

Digital Sound Studio

The Affordable Answer to Your Audio Dreams

Record, Edit, Compose . . .

With a high-quality stereo sound sampler,

A fast, powerful, easy-to-use sound editor,

And a self-contained 4-track sequencer.

For all the sound effects and music you could ever imagine.

► **Record** sound samples from any source, including voices, noise, and pre-recorded instruments, to create your own instruments and effects.

► **Edit** sounds quickly in real time. Add effects like reverb and echo, run sounds backward, alter wave forms, cut and paste sound segments, create loops, eliminate pops and scratches.

► **Compose** easily using the DSS 4-track sequencer and your Amiga or MIDI keyboard. Draw from up to 32 instruments at a time, in up to four octaves with 8 different variable effects. Mix and modify sounds in real time as you compose, through direct interface with the sound editor.

DSS Stretches the outer limits of 8-bit sound

- Create your own 4-track, self-playing musical compositions.
- Make soundtracks for home video, animation or visual presentations complete with voice-over, sound effects and music.
- Analyze voice patterns and stereo separation.
- Analyze graphic equalization of real-time sound.
- Remove "pops" from old phonograph recordings.
- Create custom instruments and sound effects by collecting and/or modifying pre-recorded instruments, voice, or sounds from any source, and use them in your own compositions.
- Save your sound and music to disk or send it out via modem for replay on any Amiga.



Check out these unparalleled features

- ✓ AmigaDOS 2.0 compatible; written in assembly language.
- ✓ Multi-tasking operation.
- ✓ 68020 and 68030 compatible.
- ✓ Comprehensive tutorial manual helps even beginners get started right away.
- ✓ Intuition-based graphic interface makes operation easy.
- ✓ MIDI-in capability.
- ✓ Direct interface between sequencer and editor.
- ✓ Hold 32 sound samples in memory at once – all shown on screen so they are easy to manipulate.
- ✓ Effects and processing capabilities include echo, mix, filter, re-sample, sound data inversion, playing sounds backwards, loops, fade-in/fade-out and more.
- ✓ Manipulate sound samples in real time, as you listen.
- ✓ Create sampled instruments with 1, 3 and 8 octaves.
- ✓ HIFI recording for highest quality playback.
- ✓ Controls for faster/slower playback and filtering high frequencies during playback.
- ✓ Load and save samples, songs and instruments in multiple formats.
- ✓ Multiple effects for each note.
- ✓ Stereo and monophonic operation. Also convert mono to stereo or separate stereo.
- ✓ Auto-playing music modules.

✓ Real-time oscilloscope and spectrum analysis.

✓ Real-time reverberation.

✓ Graphic editing of wave forms through easy-to-use functions, including zoom in/out and precision controls for position, frequency and amplitude.

✓ Draw sound waves freehand using the mouse.

✓ Direct editing of individual sample numeric values.

✓ Maximum recording speed of 51,000 samples/second in stereo.

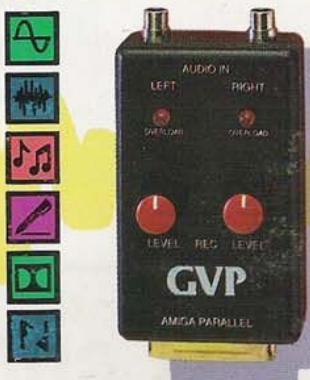
✓ Savable Preference settings.

✓ Saves in IFF, SONIX or RAW formats.

✓ Compatible with SoundTracker, NoiseTracker and SoundFX modules.

DSS

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